II. MORBIDITY

A. INFECTIOUS DISEASES

Hepatitis

Hepatitis A (HAV) is a viral disease that affects the liver. The number of HAV cases in Louisiana for the year 2001 decreased by 20 percent when compared to 2000. The age group distribution shows two peaks: among children age five to nine years and among young adult males. Persons at risk of contracting HAV are children in daycare (3.5 percent of cases) and household exposure to a known hepatitis A case (ten percent of cases). The geographical distribution is unremarkable, showing no consistent foci of transmission.

Hepatitis B (HBV), another viral disease that affects the liver, is a serious public health problem that affects people of all ages in the United States and around the world. Each year an estimated 1,300 people in Louisiana become infected with HBV. A person may get HBV by direct contact with the blood or body fluids of an infected person. Perinatal transmission, in which a baby contracts HBV from an infected mother during childbirth, is also a concern. Symptoms of HBV include yellowing of the skin or eyes, loss of appetite, nausea, vomiting, fever, extreme tiredness, and stomach pain. The most effective means of preventing HBV infection is immunization. Research is also being carried out on drugs that have the potential to improve the treatment of chronic hepatitis.

In the year 2001, cases of HBV in Louisiana decreased by 22 percent relative to 2000. The age group distribution shows very low rates among children with an increase of cases in early adulthood. The increase continues in adult males until age 45 to 54 years; in females, rates decrease after age 20 to 24 years. Adult males are at higher risk because of intravascular drug abuse and homosexual contacts. The geographical distribution shows higher rates in urban centers.

Hepatitis C is a viral disease that causes liver inflammation and can lead to cirrhosis and cancer of the liver. It is a disease growing in magnitude in Louisiana; an estimated 81,000 individuals (1.8 percent of the total state population) are infected. Of these, 45,000 have chronic hepatic disease. There are approximately 500 new infections occurring in Louisiana each year, of which only 25 to 30 percent are symptomatic. Symptoms of hepatitis C are often non-specific, but may include jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea, and vomiting. Persons at increased risk of contracting hepatitis C include injecting drug users, people having sex with infected persons, persons with multiple sex partners, recipients of blood transfusions before July 1992, health care workers exposed to infected blood, and infants born to infected women. While there is no vaccine available to prevent hepatitis C, antiviral drugs such as interferon used alone or in combination with ribavirin are approved for the treatment of persons with chronic hepatitis C.

In 2001, 151 new cases of hepatitis C (3.4 per 100,000 population) were reported in Louisiana. This represents a 66 percent decrease from the previous year. Most likely, this decrease results from a change mandated by the Centers for Disease Control and Prevention (CDC) in the case definition for acute hepatitis C. Beginning in 1990, the designation for elevated liver enzymes was established by CDC as 2.5 times the upper limit of the normal enzyme count. However, in 2000, CDC increased the required elevation level to seven times the upper limit of the normal count, thus excluding a large number of cases that would previously have been considered reportable. The age group distribution shows that the highest rates occur among adults, particularly those who are black or male (71 percent of all cases).

Pertussis

Pertussis (whooping cough) is a respiratory illness that can affect all age groups, but is mostly found in infants and young children. It is caused by a bacterium called *Bordetella pertussis*. These bacteria are present in the mouths and noses of infected people. Pertussis symptoms begin with the usual cold symptoms, which then develop into coughing fits with a high-pitched "whooping" sound. Pertussis can be fatal in infants. Immunization against pertussis involves five doses of the DTaP (diphtheria, tetanus, and acellular pertussis) combination vaccination starting at the age of two months. There were twelve cases reported in Louisiana in the year 2001, which is a decrease of 40 percent from the year 2000 (21 cases). Infants and young children are at highest risk of acquiring pertussis, 33 percent of reported cases were among infants and one year olds, and 22 percent of cases were among children ages one to four years. Half of the reported cases for which vaccination status was known had not been immunized.

Mumps

Mumps is a viral respiratory disease that causes swelling and pain of salivary glands in the face and neck. Mumps is spread by contact with infected people. This disease is contagious from one to two days before and until seven days after symptoms appear. It is most infectious when the swelling starts. The symptoms are fever, pain in front of the ears that increases during chewing, and swollen glands in the cheeks and sometimes under the jaw. It is most likely to affect children ages five to nine years, but may occur at any age. It is likely to be more serious and painful in teenagers and adults.

Immunization against mumps involves two doses of MMR (measles, mumps and rubella) vaccine, usually at age twelve months and at four to six years.

In the year 2001, two cases of mumps were reported in Louisiana -- a decrease from five cases in 2000.

Selected Infectious Diseases Counts
Louisiana 1997-2001

	1997	*1998*	*1999*	*2000*	*2001*
Hepatitis A	266	173	213	107	87
Hepatitis B	208	219	172	156	123
Hepatitis C	276	137	302	457	151
Pertussis	22	13	10	21	12
Mumps	18	9	11	5	2

B. TUBERCULOSIS

Background

Pulmonary tuberculosis (TB) results from infection with an organism named *Mycobacterium tuberculosis*. Persons with TB may transmit the organism by coughing. If untreated, a pulmonary TB case may infect others who breathe in the organisms expelled by the infected person. Infection is not limited to the lungs as it can also occur in other regions of the body.

Due to the danger of contagion, individuals who have been exposed to TB should be identified and evaluated. A simple skin test is used to determine if the exposed person has been infected. If the skin test and evaluation reveal that the person has been infected, a course of preventive therapy may be prescribed to protect against progression from TB infection to TB disease. Preventive therapy generally consists of six months of therapy with a single anti-TB drug called isoniazid, or INH.

Treatment of TB disease requires an initial course of four anti-tuberculosis drugs. Length of treatment for TB disease is usually six months, but may vary due to the severity of illness or the presence of other factors, such as the Human Immunodeficiency Virus (HIV). Due to the potentially great public health impact of this infectious disease, and because of the intricacy of the therapy (i.e. length of treatment and number of medications involved), a practice called Directly Observed Therapy (DOT) is employed to assist the patient with his or her therapy and assure completion. With DOT, trained field staff or medical personnel monitor the efficacy of treatment and the patient's compliance with the treatment regimen.

2002 Status

Louisiana reported 231 cases of TB in the year 2002, for a case rate of 5.2 per 100, 000 population. This represents an 11.2 percent decrease from the year 2000 figure of 294 cases (6.6 per 100,000 population) and a 35.3 percent decrease since the 1999 report of 357 cases (8.2 per 100,000 population). This seven-year trend is the outcome of ten years of transmission intervention through DOT and thorough contact investigation by a dedicated tuberculosis control staff.

Tuberculosis Case Counts Louisiana, 1998-2002

1998	*1999*	*2000*	*2001*	*2002*
380	357	332	294	231

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

In 2001, Louisiana's state ranking for TB case rates (i.e. cases per 100,000) was the eighth highest in the nation. The state's year 2001 rate was similar to those in neighboring states but was significantly higher than the national rate of 5.6 per 100,000. The national rate for 2001 declined 2 percent from 2000.

Tuberculosis Cases and Rates*

Louisiana and Neighboring States, 2002

State	*Number of Cases*	*Case Rate*
Alabama	233	5.2
Arkansas	136	5.0
Louisiana	231	5.2
Mississippi	135	4.7
Texas	1,550	7.1
United States	15,078	5.2

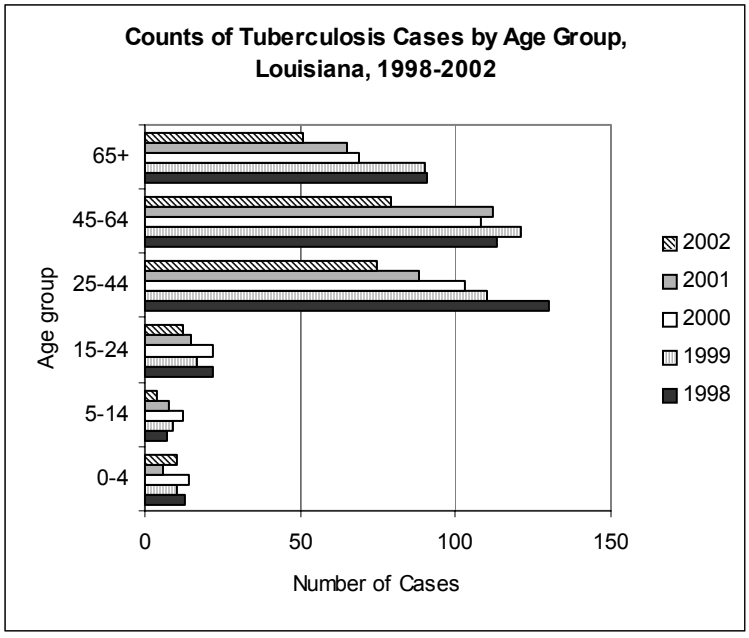
*Rate per 100,000 population

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

National Tuberculosis Surveillance System, Division of Tuberculosis Elimination, Centers for Disease Control and Prevention. Provisional 2002 data.

Drug-resistant TB continues to be a problem in Louisiana. While no cases of multi-drug-resistant tuberculosis (MDR-TB) were reported in 2002, the incidence of single-drug (INH) resistance continues at 1.5 percent, with the recommended threshold for initiating a four-drug anti-TB regimen for new (or suspected) cases of TB being 4 percent.

As shown in the following graph, an increase in the number of reported cases of TB in Louisiana was observed in children (below age 5 years), and decreases were seen in all other age groups.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

Louisiana Tuberculosis Cases and Rates By Region and Parish, 2002 State Total = 231 State Case Rate = 5.2 per 100,000		
Region/Parish	*Cases*	*Rate/100,000*
Region 1	82	7.9
Jefferson	17	3.7
Orleans	61	12.8
Plaquemines	0	0.0
St Bernard	****	5.9
Region 2	22	3.7
Ascension	****	1.4
East Baton Rouge	15	3.7
East Feliciana	0	
Iberville	****	1.3
Pointe Coupee	****	8.3
West Baton Rouge	****	4.7
West Feliciana	****	14.5
Region 3	18	4.6
Assumption	0	0.0
Lafourche	5	5.5
St Charles	****	2.0
St James	0	0.0
St John	****	2.3
St Mary	10	17.1
Terrebonne	****	0.9
Region 4	21	3.8
Acadia	5	8.5
Evangeline	****	2.9
Iberia	****	2.7
Lafayette	6	3.1
St Landry	****	3.5
St Martin	****	2.1
Vermilion	****	5.6
Region 5	9	3.2
Allen	****	4.1
Beauregard	0	0.0
Calcasieu	7	3.8
Cameron	0	0.0
Jefferson Davis	****	3.1
Region 6	6	1.9
Avoyelles	****	2.4
Catahoula	0	0.0
Concordia	****	4.7
Grant	****	5.1
LaSalle	0	0.0
Rapides	****	1.5
Vernon	0	0.0
Winn	****	5.5

Louisiana Tuberculosis Cases and Rates By Region and Parish, 2002 State Total = 231 State Case Rate = 5.2 per 100,000		
Region/Parish	*Cases*	*Rate/100,000*
Region 7	36	6.9
Bienville	0	0.0
Bossier	****	2.1
Caddo	29	11.7
Claiborne	****	5.8
DeSoto	****	3.9
Natchitoches	****	5.3
Red River	0	0.0
Sabine	****	4.1
Webster	0	0.0
Region 8	27	7.5
Caldwell	0	0.0
East Carroll	0	0.0
Franklin	****	4.4
Jackson	****	12.6
Lincoln	0	0.0
Madison	0	0.0
Morehouse	0	0.0
Ouachita	18	12.0
Richland	****	14.0
Tensas	0	0.0
Union	****	8.9
West Carroll	****	8.0
Region 9	10	2.3
Livingston	****	1.1
St Helena	0	0.0
St Tammany	6	3.1
Tangipahoa	****	1.0
Washington	****	4.5

****Refers to count greater than 0 and less than 5.

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

C. SEXUALLY TRANSMITTED DISEASES

Overview

Sexually transmitted diseases (STDs) are the most commonly reported diseases in the United States and affect almost 15.3 million people in the United States in all population groups each year. By age 21, one in five young adults will have received treatment for an STD. Among the most serious complications are pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects.[1]

STD Rates* and National Rankings** Louisiana, 1998-2002

	Primary and Secondary Syphilis		*Gonorrhea*		*Chlamydia*	
Year	*Rate*	*Rank*	*Rate*	*Rank*	*Rate*	*Rank*
1998	9.9	3	287.2	4	349.0	5
1999	7.0	3	301.9	3	380.8	4
2000	4.8	8	302.9	2	408.2	3
2001	4.0	8	291.0	1	423.0	4
2002 ***	3.4	-	255.0	-	412.9	-

* Rates per 100,000 Population, Census 1990

** States ranked from highest to lowest disease incidence. Nationwide ranks for 2002 currently not available.

*** Rate per 100,000 Population, Census 2000

Sources: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2002

Centers for Disease Control and Infection, STD Surveillance Report 2001

Syphilis

Syphilis infections are caused by *treponema pallidum*, a spirochete (bacterium). The primary stage of the disease is characterized by a painless, indurated ulcer that appears at the site(s) of exposure in about 21 days (range of 10-90 days), and lasts from 1 to 5 weeks. The secondary stage, which usually appears 1 to 5 weeks after the primary ulcer has healed, is characterized by skin rash, mucous patches, and *condyloma lata*, sometimes accompanied by generalized lymphadenopathy, headache, and fever. The latent stage is defined as any interval following the primary stage during which the infected individual has no clinical signs or symptoms.

Louisiana had the third highest rate of primary and secondary syphilis nationwide during the years 1998 and 1999. In the year 2000, the rate dropped to the eighth highest, and that ranking was maintained in the year 2001. The total number of reported cases of early syphilis (primary, secondary, and early latent syphilis) has been consistently declining, from 5,373 cases in 1993, to 335 cases in the year 2002. In the latter year, 49.6 percent of early syphilis cases occurred in females, and 89.6 percent of the cases among blacks. Sixty-six percent of early syphilis cases occurred within the 15 to 34 year old population group.

1 National Center for Health Statistics. *Healthy People 2000 Review, 1997*. Hyattsville, Maryland: Public Health Service. 1997.

During the last five years, sharp and consistent declines in early syphilis rates have occurred. In the white population, the rate per 100,000 people decreased from 3 to 2 in the years 2000 to 2001, and was 1 in year 2002. In blacks, the rate per 100,000 people decreased from 61 to 48 between the years 1998 and 1999, to 28 in 2000, to 25 in 2001, and, finally, to 21 in 2002.

Early Syphilis (Primary, Secondary, and Early Latent) Rates* by Sex and Race
Louisiana, 1998-2002

Year	White			Blacks			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
1998	3.0	3.0	3.0	64.0	58.0	61.0	10.0	7.0	9.0
1999	3.0	3.0	3.0	48.0	47.0	48.0	0.0	7.0	4.0
2000	2.0	3.0	2.0	32.0	26.0	28.0	0.0	2.0	1.0
2001	2.0	1.0	2.0	27.0	23.0	25.0	0.0	5.0	2.0
2002 **	0.9	1.1	1.0	22.2	19.3	20.7	3.7	2.5	3.1

* Rates per 100,000 Population, Census 1990

** Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2002

The Louisiana incidence rate for primary and secondary syphilis for 2002 was 3.4 per 100,000 people (Census 2000), and the latest national rate available (year 2001) was 2.2. The *Healthy People 2010* rate objective for primary and secondary syphilis is 0.2.

Primary and Secondary Syphilis Rates
Louisiana, Neighboring States, and United States, 1997-2001

State	1997	1998	1999	2000	2001
Alabama	9.5	6.3	4.6	2.8	3.2
Arkansas	6.9	4.3	3.4	4.1	1.8
*Louisiana **	8.4	9.8	7.0	4.8	3.9
Mississippi	14.3	9.5	7.0	4.9	4.9
Texas	3.5	2.2	2.4	2.0	2.3
United States	3.2	2.6	2.4	2.2	2.2

* Rates per 100,000 Population, Census 1990

Gonorrhea

Infections by *Neisseria gonorrhoeae* may be symptomatic or asymptomatic, and may include genital, anorectal, and/or pharyngeal infections.

Louisiana had the fourth highest nationwide rate of gonorrhea in the year 1998, the third highest in the years 1999 and 2000, and the highest in the year 2001. The total number of reported cases of gonorrhea had been increasing (mainly due to improved laboratory reporting) from 12,543 in 1998 to 13,265 in 2000. In the year 2001 the total number of reported cases of gonorrhea was 12,288, which decreased to 11,396 in 2002. Approximately half (51.5 percent) of the cases of gonorrhea in Louisiana in the year 2002 occurred in females; 82.6 percent of cases occurred in blacks; 26.9 percent of the cases occurred among teens aged 15 to 19 year old, and 38.3 percent of the cases occurred among 20 to 24 year olds.

Gonorrhea Rates* by Sex and Race Louisiana, 1998-2002									
	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
1998	19.0	35.0	28.0	958.0	757.0	851.0	49.0	124.0	88.0
1999	25.0	48.0	37.0	966.0	792.0	874.0	41.0	63.0	52.0
2000	22.0	39.0	31.0	1019.0	780.0	892.0	22.0	32.0	27.0
2001	23.0	40.0	31.0	929.0	727.0	821.0	17.0	46.0	32.0
2002 **	21.1	45.7	33.7	702.7	598.6	648.2	8.6	15.1	11.8

* Rates per 100,000 Population, Census 1990
** Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2002

The Louisiana incidence rate of gonorrhea for 2002 was 255 per 100,000 population (Census 2000), and the latest national rate available (year 2001) was 128.5. The *Healthy People 2010* objective for gonorrhea is to reduce the rate to 19.0 per 100,000 population.

Gonorrhea Rates Louisiana, Neighboring States, and United States, 1997-2001					
State	1997	1998	1999	2000	2001
Alabama	278.5	292.7	249.2	276.0	251.4
Arkansas	173.7	155.7	126.4	142.7	172.2
Louisiana *	247.8	286.1	301.7	302.9	274.2
Mississippi	343.1	388.4	376.0	332.9	272.8
Texas	136.9	166.2	164.2	164.2	144.0
United States	122.0	131.6	132.0	131.6	128.5

* Rates per 100,000 Population, Census 1990

Chlamydia

Infection caused by *Chlamydia trachomatis* is among the most prevalent STDs in the United States. Therapy is commonly based on the clinical syndrome, and is often administered simultaneously with treatment for gonorrhea.

Louisiana had the fifth highest rate of chlamydia nationwide in 1998. In 1999 the rate rose to fourth highest and up to the third highest rate in the year 2000. In 2001, it returned to the fourth highest. Since 1997, the number of reported cases of chlamydia has been increasing. The total number of reported cases was 11,512 in 1997, increased to 15,305 reported cases in 1998, further increased to 16,573 in 1999 and to 17,921 in 2000. The case count for Chlamydia then decreased slightly to 17,859 in 2001, and rose up to 18,451 in 2002. Eighty percent of reported cases of chlamydia in Louisiana in 2002 occurred in females; 73 percent of cases occurred in blacks; 35.4 percent of cases occurred in the 15 to 19 year-old age group, and 41.4 percent among 20 to 24 year-olds.

The Louisiana chlamydia rate for 2002 was 413 per 100,000 population (Census 2000), and the latest national rate available (year 2001) was 278.3. The *Healthy People 2000 Review 1997* objective for *chlamydia trachomatis* infections was to reduce the prevalence in women under 25 years of age to no more than 5 percent (as measured by a decrease in the prevalence of chlamydia infection among family planning clients).

Chlamydia Rates* by Sex and Race
Louisiana, 1998-2002

	White			Black			Other		
Year	*Males*	*Females*	*Total*	*Males*	*Females*	*Total*	*Males*	*Females*	*Total*
1998	25.0	125.0	76.0	411.0	1360.0	919.0	71.0	278.0	174.0
1999	30.0	141.0	87.0	448.0	1369.0	941.0	24.0	198.0	111.0
2000	27.0	140.0	85.0	518.0	1477.0	1031.0	12.0	115.0	63.0
2001	28.0	145.0	88.0	457.0	1539.0	1035.0	22.0	90.0	56.0
2002 **	30.0	150.1	91.5	403.7	1392.0	927.7	17.2	65.4	41.0

* Rates per 100,000 Population, Census 1990
** Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2002

Chlamydia Rates
Louisiana, Neighboring States, and United States, 1997-2001

State	***1997***	***1998***	***1999***	***2000***	***2001***
Alabama	201.5	231.3	283.2	350.7	326.6
Arkansas	99.2	162.4	229.9	243.8	272.3
Louisiana *	265.3	347.6	380.5	408.2	399.2
Mississippi	367.0	385.7	417.0	458.6	414.6
Texas	260.7	305.9	314.1	343.3	334.5
United States	207.0	234.2	251.6	257.5	278.3

* Rates per 100,000 Population, Census 1990

Sexually Transmitted Disease Rates[+] by Parish
Louisiana, 2002

Parish	*Early Syphilis (Primary, Secondary, And Early Latent)*	*Gonorrhea*	*Chlamydia*
State Total	7.5	255.0	413.0
Acadia	2.0	131.0	182.0
Allen	4.0	1.0	263.0
Ascension	0.0	59.0	108.0
Assumption	4.0	137.0	244.0
Avoyelles	5.0	116.0	251.0
Beauregard	0.0	82.0	206.0
Bienville	25.0	267.0	495.0
Bossier	1.0	288.0	544.0
Caddo	6.0	798.0	1093.0
Calcasieu	3.0	214.0	314.0
Caldwell	0.0	152.0	303.0
Cameron	0.0	60.0	200.0
Catahoula	0.0	156.0	229.0
Claiborne	12.0	303.0	540.0
Concordia	0.0	242.0	361.0
DeSoto	4.0	373.0	604.0
East Baton Rouge	21.0	238.0	319.0
East Carroll	0.0	425.0	934.0

Sexually Transmitted Disease Rates[+] by Parish Louisiana, 2002			
Parish	*Early Syphilis (Primary, Secondary, And Early Latent)*	*Gonorrhea*	*Chlamydia*
East Feliciana	51.0	94.0	267.0
Evangeline	0.0	93.0	285.0
Franklin	14.0	127.0	165.0
Grant	0.0	118.0	203.0
Iberia	19.0	239.0	464.0
Iberville	3.0	141.0	321.0
Jackson	6.0	188.0	357.0
Jefferson	1.0	104.0	215.0
Jefferson Davis	3.0	86.0	239.0
Lafayette	20.0	210.0	313.0
Lafourche	3.0	114.0	239.0
LaSalle	0.0	35.0	112.0
Lincoln	40.0	332.0	426.0
Livingston	8.0	34.0	88.0
Madison	0.0	175.0	466.0
Morehouse	0.0	380.0	477.0
Natchitoches	0.0	563.0	906.0
Orleans	9.0	602.0	961.0
Ouachita	2.0	230.0	272.0
Plaquemines	0.0	86.0	164.0
Pointe Coupee	9.0	101.0	246.0
Rapides	1.0	241.0	492.0
Red River	0.0	447.0	852.0
Richland	0.0	191.0	415.0
Sabine	0.0	145.0	183.0
St. Bernard	0.0	65.0	122.0
St. Charles	2.0	83.0	183.0
St. Helena	0.0	181.0	409.0
St. James	0.0	80.0	311.0
St. John	7.0	123.0	330.0
St. Landry	9.0	184.0	304.0
St. Martin	23.0	169.0	196.0
St. Mary	4.0	172.0	262.0
St. Tammany	2.0	66.0	143.0
Tangipahoa	5.0	328.0	542.0
Tensas	0.0	196.0	665.0
Terrebonne	22.0	160.0	286.0
Union	0.0	189.0	206.0
Vermilion	2.0	48.0	71.0
Vernon	2.0	131.0	329.0
Washington	0.0	184.0	275.0
Webster	2.0	201.0	354.0
West Baton Rouge	14.0	69.0	213.0
West Carroll	0.0	73.0	219.0
West Feliciana	13.0	93.0	205.0
Winn	12.0	189.0	314.0

[+]Rates per 100,000 Population, Census 2000

Source: Louisiana Department of Health and Hospitals Office of Public Health, STD Control Program 2002

D. HIV/AIDS

Background

Acquired Immunodeficiency Syndrome (AIDS) is caused by the *human immunodeficiency virus*, or HIV. People infected with HIV can develop many health problems, including extreme weight loss, severe pneumonia, cancer, and damage to the nervous system. These illnesses signal the onset of AIDS. The time at which symptoms first begin to appear varies from person to person. In some people, these illnesses may develop within a year or two, while others may remain asymptomatic for 10 years or more. Although recent advances in treatment have significantly slowed the progression from HIV to AIDS and from AIDS to death, there is still no cure for the disease. This means that the most effective way to curb the HIV/AIDS epidemic is through the provision of HIV prevention interventions and improved access to treatment and other services for HIV-infected persons.

The HIV/AIDS epidemic continues to greatly impact public health in Louisiana and will make growing demands on health and social service systems for many decades. The lifetime medical cost for caring for a person with AIDS is over $100,000, most of which is paid for by the government. Every year, new infections obligate Louisiana to approximately $120 million in future medical costs.

Summary

As of December 31, 2001, there were 13,565 persons reported to be living with HIV/AIDS in Louisiana. In 2001 alone, 858 new AIDS cases were diagnosed and 1,078 new HIV cases were detected and reported.

There are persons living with HIV/AIDS in every parish in Louisiana and in the year 2001, new cases of HIV/AIDS were detected in 57 of Louisiana's 64 parishes. The HIV detection rate among blacks remains disproportionately high. In 2001, 74 percent of newly-detected HIV/AIDS cases and 75 percent of newly-diagnosed AIDS cases were among blacks. The 2001 HIV detection rate for blacks was over six times higher than that of whites.

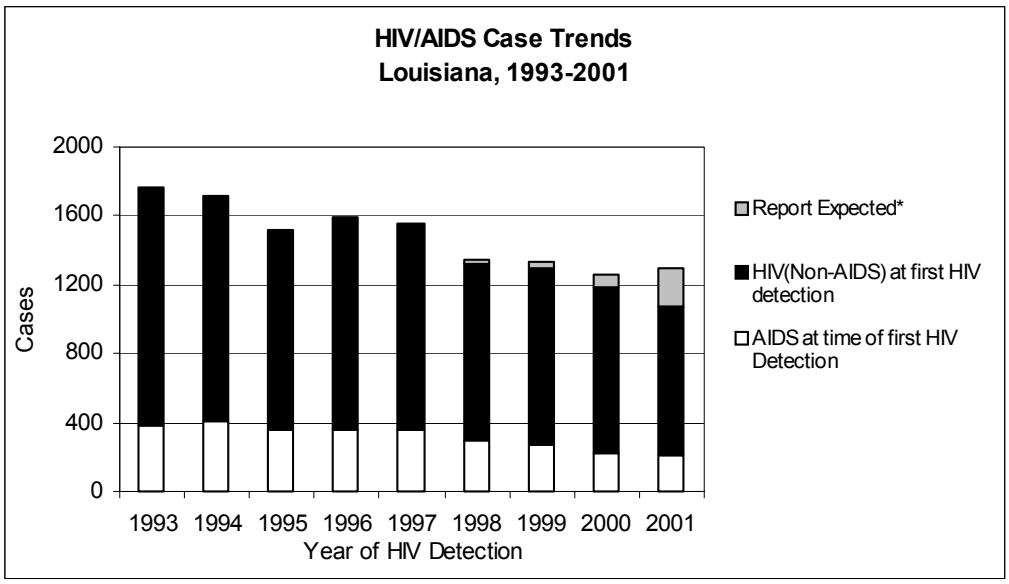
For the first time in 2001, the largest proportion of cases detected (38 percent) were attributed to high-risk heterosexual activity, after adjusting for unreported risk. For blacks, high-risk heterosexual activity has remained the leading exposure category, while among whites, the predominant exposure to HIV is high risk sexual activity among men who have sex with men (MSM).

AIDS-related mortality began to decline dramatically in 1996, coinciding with the emergence of more effective treatments; however, the number of AIDS-related deaths appears to be stabilizing. In the year 2001, the number of new AIDS cases increased for the first time since the introduction of new drug therapies in 1996. The transmission of HIV from mothers to their infants has dropped dramatically in Louisiana, from over 25 percent of all HIV infected mothers in 1993 to 5 percent in 2000.

2001 Status

New highly active antiretroviral therapies (HAART) have been shown to be effective in altering the natural history of (and therefore treating) HIV infection. These new therapies have delayed the progression from HIV to AIDS and from AIDS to death among many people infected with virus. Due to the widespread use of these new HIV treatments, Louisiana (as well as the rest of the nation), has seen yearly declines in both the number of new AIDS cases diagnosed and AIDS-related deaths.

In the year 2001, however, Louisiana ranked eighth highest in AIDS case rates nationwide, a decline from tenth in the year 2000. The state ranked thirteenth in the number of new AIDS cases reported in the United States for the year 2001 up from seventeenth in the previous year. Louisiana's AIDS case rate continues to be higher than the rates of neighboring states.



Source: Louisiana Office of Public Health: HIV/AIDS Program

*The period of time between when a case is diagnosed and when it is reported (reporting delay) causes distortions in trends for recently diagnosed cases. Reporting delays were estimated using a maximum likelihood procedure, taking into account possible differences in reporting delays among exposure, geographic, ethnic, age, and sex categories. The estimated number of cases that will be reported are presented as "expected" cases. Adjustment programming was developed by the CDC.

AIDS Cases and Rates Louisiana, Neighboring States, and United States, 1999-2001									
	1999		2000		2001		Cumulative Totals*		
State	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Adults	Children less than 13	Total
Alabama	476	10.9	483	10.9	438	9.8	6,632	74	6,706
Arkansas	194	7.6	194	7.3	199	7.4	3,139	38	3,177
Louisiana	854	19.5	679	15.2	861	19.3	13,350	125	13,475
Mississippi	421	15.2	431	15.2	418	14.6	4,821	56	4,877
Texas	3,181	15.9	2,667	12.8	2,892	13.6	56,344	386	56,760
United States	46,400	16.7	40,307	14.3	41,755	14.7	780,012	8,660	788,672

Source: CDC HIV/AIDS Surveillance Report (Vol. 13, No.2)
*The cumulative total includes all cases of AIDS reported to the health departments from 1984 (when AIDS became reportable) through December 31, 2001.

The New Orleans area had the highest number of HIV/AIDS cases detected in 2001. However, in 2001, as in past years, the Baton Rouge area surpassed the New Orleans area in HIV/AIDS detection rates (number of cases per population in the region). The metropolitan Baton Rouge area ranked seventh and the metropolitan New Orleans area ranked nineteenth in AIDS case rates in 2001 among the large cities in the nation.

Persons Living with HIV/AIDS

The decline in morbidity and mortality has led to an increase in the number of persons living with HIV/AIDS, which, continues to increase in Louisiana each year. As mentioned previously, 13,565 persons in Louisiana were known to be living with HIV/AIDS in the year 2001. These numbers reflect only those persons who were confidentially tested and reported to the state Department of Health and Hospitals, suggesting that these numbers certainly underestimate the total number of persons infected with HIV in Louisiana and should be considered only as minimum estimates. As the number of persons living with HIV continues to increase, more resources will need to be directed toward programs and services that address primary and secondary prevention, early detection, and effective treatment.

Currently, there are persons living with HIV/AIDS in every parish in Louisiana. As of the end of 2001, nine parishes had greater than 300 persons living with HIV per 100,000 persons living in the parish. The HIV/AIDS Program has funded community-based organizations in every region of the state to deliver HIV prevention programs to persons at high risk and to provide services for persons with HIV/AIDS.

Persons Living with HIV/AIDS by Parish Louisiana, December 2001			
Parish	*Persons Living with HIV/AIDS*	*Parish*	*Persons Living with HIV/AIDS*
Statewide	13,565	*Region VI*	591
		Avoyelles	143
Region I	6,094	*Catahoula*	14
Jefferson	1,095	*Concordia*	21
Orleans	4,884	*Grant*	17
Plaquemines	22	*LaSalle*	7
St. Bernard	93	*Rapides*	279
		Vernon	51
Region II	2,857	*Winn*	59
Ascension	88		
East Baton Rouge	2,215	*Region VII*	931
East Feliciana	99	*Bienville*	15
Iberville	214	*Bossier*	106
Pointe Coupee	34	*Caddo*	613
West Baton Rouge	79	*Claiborne*	74
West Feliciana	128	*Desoto*	21
		Natchitoches	46
Region III	403	*Red River*	6
Assumption	20	*Sabine*	16
Lafourche	62	*Webster*	34
St. Charles	58		
St. James	38	*Region VIII*	604
St. John the Baptist	49	*Caldwell*	6
St. Mary	56	*East Carroll*	23
Terrebonne	120	*Franklin*	12
		Jackson	6
Region IV	833	*Lincoln*	38
Acadia	56	*Madison*	40
Evangeline	29	*Morehouse*	37
Iberia	74	*Ouachita*	350
Lafayette	421	*Richland*	44
St. Landry	140	*Tensas*	23
St. Martin	62	*Union*	18
Vermilion	51	*West Carroll*	7
Region V	671	*Region IX*	580
Allen	155	*Livingston*	88
Beauregard	52	*St. Helena*	****
Calcasieu	422	*St. Tammany*	203
Cameron	****	*Tangipahoa*	144
Jefferson Davis	38	*Washington*	142

**** Refers to counts greater than 0 and less than 5.
Source: Louisiana Department of Health and Hospitals, Office of Public Health HIV/AIDS Program

Shifts in the Epidemic

In keeping with national trends, Louisiana has seen a shift over the last decade in the HIV/AIDS epidemic among women, minorities, and high-risk heterosexuals as the rates have steadily risen among these groups. The percentage of persons in the state living with HIV/AIDS, who likely contracted their infection through high-risk heterosexual contact, increased from 7 percent in 1990 to an estimated 38 percent in 2001. In the latter year, for the first time since the beginning of the epidemic, high-risk heterosexual contact represented the largest proportion of newly-detected cases.

Blacks continue to be disproportionately impacted by HIV/AIDS. In 2001, 74 percent of newly-detected HIV/AIDS cases were among blacks, while blacks comprise only 32 percent of the total state population. The 2001 HIV detection rate among blacks was over six times higher than the rate among whites, and two times higher than the rate among Hispanics.

The percentage of newly detected HIV/AIDS cases reported among women in Louisiana has been increasing steadily. In 1993, 21 percent of all newly-detected cases were women; this percentage increased to 36 percent in the year 2001. Black women accounted for 84 percent of all new HIV/AIDS cases among women detected with the virus in 2001.

Newly-detected HIV/AIDS Cases, by Demographics and Exposure Group

Louisiana, 1995-2001

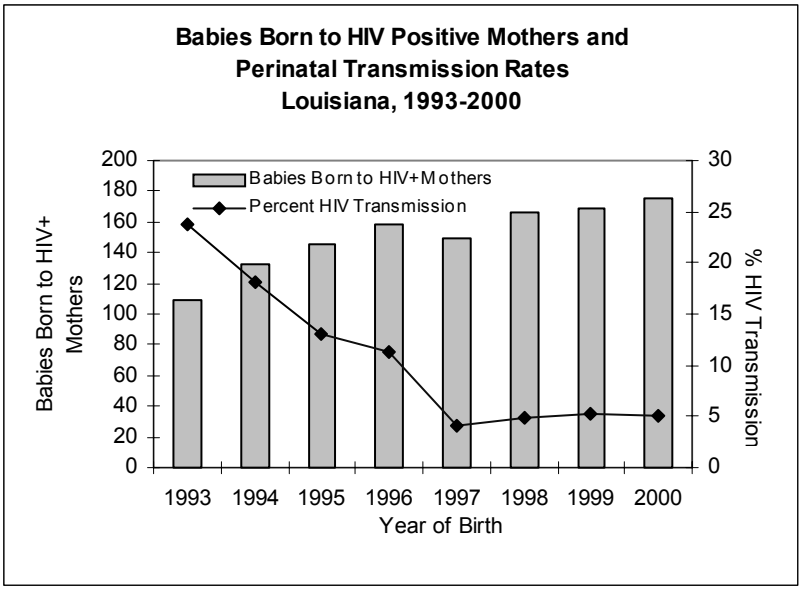
	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*
Total Cases	1,519	1,590	1,560	1,326	1,297	1,182	1,078
Sex							
Male	1,133	1,132	1,098	908	913	787	689
Female	386	458	462	418	384	395	389
Ethnicity							
Black	1,039	1,117	1,102	971	951	877	796
White	446	431	414	320	310	276	243
Other	29	41	39	34	31	26	33
Unknown	5	1	5	1	5	3	6
Exposure Group							
Cases with Specified Risk	1,120	1,050	958	782	652	551	443
*MSM**	47%	47%	46%	45%	48%	49%	46%
*IDU**	28%	28%	27%	26%	26%	22%	24%
*HRH**	21%	22%	25%	26%	24%	25%	27%
*Transf/Hemo**	2%	1%	1%	2%	2%	3%	0%
Perinatal	2%	2%	2%	1%	1%	2%	2%

* MSM: Men who have Sex with Men; IDU: Injection Drug Users (non-MSM); HRH: High Risk Heterosexual; Transf/Hemo: Transfusion/Transplant/Hemophiliac

Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program

Perinatal HIV Transmission

Despite the increasing number of women infected with HIV, the number of pediatric HIV/AIDS cases (children diagnosed when younger than thirteen years of age) has been decreasing in recent years. Perinatal transmission rates have dropped dramatically from over 25 percent of all HIV infected mothers in 1993 to 5 percent in 2000 (see graph on following page). This decline is credited to improved treatment protocols for HIV-infected pregnant women, and increased use of antiretroviral therapy during pregnancy and delivery. The OPH HIV/AIDS' Perinatal Prevention Program continues to work with medical centers and providers around the state to reinforce the importance of offering HIV counseling and testing to all pregnant women, and to encourage early diagnosis and treatment for HIV-infected pregnant women.



Source: Louisiana Department of Health and Hospitals, Office of Public Health: HIV/AIDS Program

E. CANCER

1996-2000 Status

According to the American Cancer Society, one in every four deaths in the United States is attributable to cancer. Although more people are surviving cancer now than ever before, this trend is not true for all groups. Survival rates vary according to race, age group, and type of cancer.

Five Most Common Cancers
Louisiana, 1996-2000
(Five-Year Case Counts—Invasive Cases Only)

Type	*Number of Cases*
All Cancers	97,220
Lung	16,464
Prostate	14,751
Breast	13,983
Colon & Rectum	11,807
Bladder	3,737

Source: Louisiana Tumor Registry

Cancer presents in different forms and is associated with a variety of risk factors. Several prevalent forms of cancer can be either prevented or diagnosed early enough to prevent spread to other organs.
Preventive measures can significantly reduce the risk of many cancers. The National Cancer Institute estimates that tobacco accounts for 30 percent of cancer deaths, and dietary factors and sedentary lifestyle account for another 35 percent. Most lung cancer can be prevented by not smoking, and consuming a diet low in fat and high in fiber may help prevent colon, rectal, breast, prostate, and other cancers.

Early detection is also important in lowering the rate of deaths due to cancer. Mammography, clinical breast examination, Pap tests, fecal occult blood tests, and proctosigmoidoscopy (colon exam with lighted scope) aid in early detection and treatment of cancers in their early stages. These procedures prevent the spread of existing cancers. Nonetheless, a significant portion of the population at risk for various cancers fails to participate in screening procedures[2].

2 *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. United States Department of Health and Human Services. Washington: GPO, 1990.

Five Most Common Cancers In Louisiana Males, 1996-2000

Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	595.0	All Cancers	682.2	All Cancers	51,767
Prostate	158.9	Prostate	227.8	Prostate	14,571
Lung	113.9	Lung	142.8	Lung	10,156
Colon & Rectum	74.0	Colon & Rectum	76.9	Colon & Rectum	6,159
Bladder	38.6	Stomach	20.0	Bladder	2,749
Non-Hodgkin's Lymphoma	22.9	Oral Cavity & Pharynx	21.4	Non-Hodgkin's Lymphoma	1,822

* All races combined. In situ cases are excluded. Case counts cover five years.

** Average annual age-adjusted (2000 U.S.) incidence rates per 100,000 population

Source: Louisiana Tumor Registry.

Five Most Common Cancers In Louisiana Females, 1996-2000

Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	405.2	All Cancers	395.9	All Cancers	45,453
Breast	125.8	Breast	117.6	Breast	13,829
Lung	57.6	Colon & Rectum	54.8	Lung	6,308
Colon & Rectum	47.4	Lung	48.7	Colon & Rectum	5,648
Non-Hodgkin's Lymphoma	17,2	Cervix Uteri	17.7	Corpus Uteri	1,875
Corpus Uteri	16.8	Corpus Uteri	16.8	Non-Hodgkin's Lymphoma	1,753

* All races combined. In situ cases are excluded. Case counts cover five years.

** Average annual age-adjusted (1970 U.S.) incidence rates per 100,000 population.

Source: Louisiana Tumor Registry

Background[3]

Breast cancer is the most frequently occurring invasive cancer among women in the United States and is second only to lung cancer in cancer-related deaths. Nationwide, the death rate from breast cancer decreased significantly during the 1990s, with the largest declines among younger women. Certain factors, such as family history, exposure to hormones, reproductive issues, and excessive alcohol use, can influence the risk for breast cancer. The association between the intake of diets high in fat and increased breast cancer incidence has not been firmly established. It has recently been discovered that alterations in two genes can account for most inherited breast cancer, which constitutes 5 percent of all breast cancers. Early detection improves the chances of survival, and the National Cancer Institute recommended in 1997 that women in their forties or older undergo screening mammograms on a regular

3 From National Cancer Institute (NCI) and American Cancer Society resources and publications. Statistics quoted pertain to the United States.

basis every year. Women who are at increased risk for breast cancer should seek medical advice about when to begin having mammograms, and how often to be screened.

Cervical (cervix uteri) cancer afflicts 13,000 women each year. Increased use of the Pap test has contributed to an almost 50 percent drop in cervical cancer deaths since 1973. Women who are or have been sexually active or have reached age 18 should have Pap tests and physical exams regularly.

Colorectal cancer was the second leading cause of cancer deaths in the years 1995 to 1999, although both incidence and mortality rates have been declining. Studies have shown that lifestyle factors may cause colon and rectum cancers. A diet high in fruits, vegetables and fiber, and low in fat appears to reduce the risk of colorectal cancer. Increased physical activity may also lower the risk for this type of cancer. Research suggests that increased screening and polyp removal has contributed to the reduction in the impact of this disease.

Kidney cancer accounted for approximately 2 percent of all new cancers detected between the years 1995 and 1999 in the United States. Obesity, cigarette smoking, and abuse of analgesics have been linked to increased risk for this disease while beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors. About one third of renal cell cancers and more than one half of renal pelvis and ureter cancers could be avoided by eliminating the use of tobacco.

Leukemias together accounted for 2.5 percent of the total 1995 - 1999 cancer incidence in the United States and almost one-third of cancers in children. Five main types (and an increasing number of subtypes) have been identified. Rates for all types of leukemia are higher among males than among females; for most leukemias, rates are higher among whites than blacks.

Lung cancer is the largest single cause of cancer mortality in the United States. It is difficult to detect and hard to treat. In the period between 1995 and 1999, lung cancer caused approximately 30 percent of all cancer deaths. Smoking is responsible for 85 percent of lung cancers. The risk of dying as a result of lung cancer is 22 times higher for male smokers and 12 times higher for female smokers than for people who have never smoked. Smoking rates rose significantly among high school students from 1991 to 1999, but this increasing trend appears to have leveled off.

Melanoma of the skin incidence rates have increased dramatically over the last several decades. This form of skin cancer represented only about 5 percent of all forms of skin cancers reported in 1995 to 1999 in the United States, but was responsible for about 75 percent of all skin cancer deaths. Earlier diagnoses of melanoma of the skin have increased survival rates, but the total mortality rate continues to rise gradually with the increase in incidence. Risk factors include excessive exposure to ultraviolet radiation, occupational exposures, family history, and multiple or atypical moles.

Non-Hodgkin's lymphoma cases have been increasing continuously but inexplicably over the past several decades, but the rate of increase apparently slowed in the 1990s. Part of this increase is due to AIDS-related cases. Among the risk factors are reduced immune function and exposure to certain infectious agents. Occupational exposures to certain chemicals are also suspected.

Cancer of the oral cavity and the pharynx accounted for approximately 2.5 percent of all malignancies in 1995 to 1999. In the United States, oral cancer is two to three times more common among males than females. Tobacco and alcohol account for approximately three fourths of all oral cancers in the United States. Epidemiological evidence indicates that, while smoking and drinking are independent risk factors, their combination increases risk of cancer. Use of snuff is a primary cause of cancers of the gum and cheek. Although not as prevalent as cigarette smoking, habitual use of pipes, cigars, and smokeless tobacco is associated with relative risks as great as that for cigarette smoking.

Ovarian cancer strikes over 13,000 women every year. Currently, the five-year survival rate is approximately 50 percent. Reproductive history, family history, and oral contraceptives have been linked to the incidence of ovarian cancer. As is the case for almost all cancers, the risk increases with age.

Pancreatic cancer is called a "silent" disease, as it is asymptomatic until well advanced. Survival is considered poor since only about 5 percent of patients are alive five years after diagnosis. From 1995 to 1999, it ranked eleventh for incidence of all cancers in the United States, but was fourth for cancer mortality. Little is known about the etiology of pancreatic cancer, and the only established risk factor is cigarette smoking.

Prostate cancer is the most frequently diagnosed invasive cancer in men but is a distant second to lung cancer as a cause of death. Increasingly, evidence points to diet, particularly animal fat, in prostate cancer development. Hormones are also being investigated, as well as occupational and other lifestyle factors. The National Cancer Institute (NCI) is currently conducting a study to determine whether regular screening with a digital rectal exam and a blood test for prostate-specific antigen (PSA) reduces mortality.

Urinary bladder cancer was the fourth most common type of cancer in the five-year period from 1995 to 1999 among men and the ninth most common among women in the United States. It is especially prevalent among older white men. Since the late 1980s, incidence and mortality rates have generally declined. The most important known risk factor is cigarette smoking; smokers demonstrate two to three times the risk for urinary bladder cancer as non-smokers. Several occupational exposures also increase the risk for bladder cancer. Despite previous speculation, research shows that neither artificial sweeteners nor coffee drinking appears to increase the risk of cancer.

Uterine (corpus uteri) cancer, the fourth most common cancer in women in the United States, accounted for approximately 6 percent of all cancer cases in women from 1995 to 1999. However, a limited number of deaths result from this disease, as reflected in a high five-year survival rate of 84 percent. High

cumulative exposure to estrogen is the major risk factor for the most common type of cancer of the uterine corpus; low parity and obesity are also linked to this disease.

Note on Statistics

In the following tables describing cancer incidence in Louisiana, disease counts encompass a five-year period. This evens out natural fluctuations in cancer incidence and allows a more reliable identification of the cancers that are of most concern in Louisiana. Only invasive cases are included in the following counts (i.e., in situ cases are excluded). Data come from the Louisiana Tumor Registry.

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
State Total	All Cancers	97,220	All Cancers	51,767	All Cancers	45,453
	Lung	16,464	Prostate	14,571	Breast	13,829
	Prostate	14,571	Lung	10,156	Lung	6,308
	Breast	13,983	Colon & Rectum	6,159	Colon & Rectum	5,648
	Colon & Rectum	11,807	Bladder	2,749	Corpus Uteri	1,875
	Bladder	3,737	Non-Hodgkin's Lymphoma	1,822	Non-Hodgkin's Lymphoma	1,753
Region 1	All Cancers	23,737	All Cancers	12,264	All Cancers	11,473
	Lung	4,087	Prostate	3,260	Breast	3,491
	Breast	3,511	Lung	2,408	Lung	1,679
	Prostate	3260	Colon & Rectum	1,442	Colon & Rectum	1,435
	Colon & Rectum	2877	Bladder	676	Corpus Uteri	447
	Bladder	942	Non-Hodgkin's Lymphoma	463	Non-Hodgkin's Lymphoma	403
Jefferson	All Cancers	10,433	All Cancers	5329	All Cancers	5104
	Lung	1,771	Prostate	1394	Breast	1557
	Breast	1,572	Lung	1006	Lung	765
	Prostate	1,394	Colon & Rectum	663	Colon & Rectum	622
	Colon & Rectum	1,258	Bladder	262	Corpus Uteri	200
	Bladder	451	Non-Hodgkin's Lymphoma	223	Non-Hodgkin's Lymphoma	199
Orleans	All Cancers	11,079	All Cancers	5,775	All Cancers	5304
	Lung	1,844	Prostate	1,618	Breast	1,633
	Breast	1,654	Lung	1,129	Lung	715
	Prostate	1,618	Colon & Rectum	663	Colon & Rectum	679
	Colon & Rectum	1,342	Bladder	262	Corpus Uteri	210
	Bladder	384	Non-Hodgkin's Lymphoma	201	Cervix Uteri	188
Plaquemines	All Cancers	521	All Cancers	270	All Cancers	251
	Lung	93	Prostate	64	Breast	72
	Breast	74	Lung	54	Lung	39
	Prostate	64	Colon & Rectum	22	Colon & Rectum	29
	Colon & Rectum	51	Bladder	18	Pancreas / Non-Hodgkin's Lymphoma	10*
	Bladder	26	Oral Cavity & Pharynx	16	Skin melanomas / Bladder / Ovary	8*

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
St. Bernard	All Cancers	1704	All Cancers	890	All Cancers	814
	Lung	379	Lung	219	Breast	209
	Colon & Rectum	226	Prostate	184	Lung	160
	Breast	211	Colon & Rectum	121	Colon & Rectum	105
	Prostate	184	Bladder	59	Non-Hodgkin's Lymphoma	38
	Bladder	81	Non-Hodgkin's Lymphoma	32	Corpus Uteri	32
Region 2	All Cancers	12,020	All Cancers	6,476	All Cancers	5,544
	Prostate	2,106	Prostate	2,106	Breast	1,847
	Breast	1,868	Lung	1,109	Colon & Rectum	693
	Lung	1,782	Colon & Rectum	749	Lung	673
	Colon & Rectum	1,442	Bladder	360	Non-Hodgkin's Lymphoma	217
	Bladder	474	Kidney & Renal Pelvis	227	Corpus Uteri	215
Ascension	All Cancers	1,261	All Cancers	683	All Cancers	578
	Prostate	225	Prostate	225	Breast	194
	Lung	218	Lung	130	Lung	88
	Breast	196	Colon & Rectum	72	Colon & Rectum	56
	Colon & Rectum	128	Bladder	38	Ovary	24
	Bladder	49	Oral Cavity & Pharynx	28	Non-Hodgkin's Lymphoma	21
East Baton Rouge	All Cancers	8,153	All Cancers	4,299	All Cancers	3,854
	Prostate	1,467	Prostate	1,467	Breast	1,302
	Breast	1,316	Lung	678	Colon & Rectum	484
	Lung	1,136	Colon & Rectum	496	Lung	458
	Colon & Rectum	980	Bladder	241	Non-Hodgkin's Lymphoma	158
	Bladder	325	Kidney & Renal Pelvis	150	Corpus Uteri	149
East Feliciana	All Cancers	522	All Cancers	309	All Cancers	213
	Prostate	92	Prostate	92	Breast	71
	Lung	90	Lung	66	Colon & Rectum	30
	Colon & Rectum	73	Colon & Rectum	43	Lung	24
	Breast	72	Bladder	17	Corpus Uteri	13
	Bladder	21	Oral Cavity & Pharynx	12	Ovary / Thyroid	7*
Iberville	All Cancers	769	All Cancers	440	All Cancers	329
	Prostate	133	Prostate	133	Breast	93
	Lung	126	Lung	83	Lung	43
	Breast	93	Colon & Rectum	39	Colon & Rectum	42
	Colon & Rectum	81	Bladder	29	Cervix Uteri	19
	Bladder	33	Kidney & Renal Pelvis	21	Ovary	13
Pointe Coupee	All Cancers	555	All Cancers	299	All Cancers	256
	Colon & Rectum	89	Prostate	70	Breast	77
	Lung	87	Lung	60	Colon & Rectum	43
	Breast	78	Colon & Rectum	46	Lung	27
	Prostate	70	Bladder	18	Pancreas	16
	Bladder	23	Non-Hodgkin's Lymphoma	15	Corpus Uteri	9

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	*Total*		*Males*		*Females*	
West Baton Rouge	*All Cancers*	502	*All Cancers*	274	*All Cancers*	228
	Breast	85	*Prostate*	74	*Breast*	84
	Prostate	74	*Lung*	46	*Colon & Rectum*	26
	Lung	66	*Colon & Rectum*	33	*Lung*	20
	Colon & Rectum	59	*Bladder*	16	*Ovary / Corpus Uteri*	11*
	Bladder	20	*Stomach*	14	*Non-Hodgkin's Lymphoma*	10
West Feliciana	*All Cancers*	258	*All Cancers*	172	*All Cancers*	86
	Lung	59	*Lung*	46	*Breast*	26
	Prostate	45	*Prostate*	45	*Lung*	13
	Colon & Rectum	32	*Colon & Rectum*	20	*Colon & Rectum*	12
	Breast	28	*Kidney &Renal Pelvis*	7	*Non-Hodgkin's Lymphoma / Cervix Uteri*	**
	Skin Melanomas	9	*Oral Cavity & Pharynx / Skin Melanomas*	6*	*Brain*	**
Region 3	*All Cancers*	7,152	*All Cancers*	3,905	*All Cancers*	3,247
	Lung	1,246	*Prostate*	943	*Breast*	1,015
	Breast	1,029	*Lung*	828	*Colon & Rectum*	419
	Prostate	943	*Colon & Rectum*	510	*Lung*	418
	Colon & Rectum	929	*Bladder*	248	*Corpus Uteri*	151
	Bladder	314	*Kidney & Renal Pelvis*	140	*Non-Hodgkin's Lymphoma*	138
Assumption	*All Cancers*	444	*All Cancers*	253	*All Cancers*	191
	Lung	76	*Prostate / Lung*	59*	*Breast*	61
	Breast	62	*Colon & Rectum*	30	*Colon & Rectum*	21
	Prostate	59	*Bladder*	18	*Lung*	17
	Colon & Rectum	51	*Larynx / Non-Hodgkin's Lymphoma*	9*	*Cervix Uteri*	9
	Bladder	21	*Pancreas / Leukemias*	7*	*Ovary / Kidney & Renal Pelvis*	8*
Lafourche	*All Cancers*	1,672	*All Cancers*	898	*All Cancers*	774
	Lung	268	*Prostate*	200	*Breast*	243
	Breast	249	*Lung*	174	*Colon & Rectum*	112
	Colon & Rectum	241	*Colon & Rectum*	129	*Lung*	94
	Prostate	200	*Bladder*	60	*Corpus Uteri*	39
	Bladder	83	*Non-Hodgkin's Lymphoma*	33	*Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma*	34*
St. Charles	All Cancers	857	*All Cancers*	473	*All Cancers*	384
	Prostate	139	*Prostate*	139	*Breast*	121
	Lung	131	*Lung*	79	*Lung*	52
	Breast	121	*Colon & Rectum*	57	*Colon & Rectum*	44
	Colon & Rectum	101	*Bladder*	32	*Thyroid*	18
	Bladder	33	*Non-Hodgkin's Lymphoma*	17	*Ovary*	15

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
St. James	All Cancers	451	All Cancers	247	All Cancers	204
	Breast	71	Prostate	63	Breast	70
	Lung	66	Lung	48	Colon & Rectum	28
	Prostate	63	Colon & Rectum	32	Lung	18
	Colon & Rectum	60	Kidney & Renal Pelvis	12	Kidney & Renal Pelvis	10
	Kidney & Renal Pelvis	22	Bladder	11	Corpus Uteri	8
St. John the Baptist	All Cancers	697	All Cancers	353	All Cancers	344
	Lung	120	Prostate	105	Breast	109
	Breast	110	Lung	64	Lung	56
	Prostate	105	Colon & Rectum	35	Colon & Rectum	37
	Colon & Rectum	72	Bladder	23	Cervix Uteri	18
	Bladder	34	Kidney & Renal Pelvis	16	Non-Hodgkin's Lymphoma	17
St. Mary	All Cancers	1,142	All Cancers	636	All Cancers	506
	Lung	221	Prostate	154	Breast	155
	Breast	157	Lung	150	Lung	71
	Prostate	154	Colon & Rectum	79	Colon & Rectum	57
	Colon & Rectum	136	Bladder	44	Corpus Uteri	21
	Bladder	53	Non-Hodgkin's Lymphoma	26	Ovary	19
Terrebonne	All Cancers	1,889	All Cancers	1,045	All Cancers	844
	Lung	364	Lung	254	Breast	256
	Colon & Rectum	268	Prostate	223	Colon & Rectum	120
	Breast	259	Colon & Rectum	148	Lung	110
	Prostate	223	Bladder	60	Non-Hodgkin's Lymphoma	48
	Non-Hodgkin's Lymphoma	83	Kidney & Renal Pelvis	46	Corpus Uteri	46
Region 4	All Cancers	11,875	All Cancers	6,322	All Cancers	5,553
	Lung	2,053	Prostate	1,723	Breast	1,647
	Prostate	1,723	Lung	1,226	Lung	827
	Breast	1,667	Colon & Rectum	765	Colon & Rectum	599
	Colon & Rectum	1,364	Bladder	300	Corpus Uteri	239
	Non-Hodgkin's Lymphoma	430	Kidney & Renal Pelvis	215	Non-Hodgkin's Lymphoma	218
Acadia	All Cancers	1,476	All Cancers	788	All Cancers	688
	Lung	258	Prostate	212	Breast	181
	Prostate	212	Lung	143	Lung	115
	Colon & Rectum	197	Colon & Rectum	109	Colon & Rectum	88
	Breast	184	Bladder	31	Corpus Uteri	35
	Non-Hodgkin's Lymphoma	55	Oral Cavity & Pharynx	28	Non-Hodgkin's Lymphoma	32
Evangeline	All Cancers	774	All Cancers	388	All Cancers	386
	Lung	165	Lung	92	Breast	92
	Breast	93	Prostate	89	Lung	73
	Colon & Rectum	90	Colon & Rectum	52	Colon & Rectum	38
	Prostate	89	Oral Cavity & Pharynx / Kidney & Renal Pelvis	17*	Non-Hodgkin's Lymphoma	21
	Non-Hodgkin's Lymphoma	35	Non-Hodgkin's Lymphoma / Bladder	14*	Pancreas	16

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
Iberia	All Cancers	1,615	All Cancers	857	All Cancers	758
	Lung	262	Prostate	231	Breast	235
	Breast	240	Lung	156	Lung	106
	Prostate	231	Colon & Rectum	113	Colon & Rectum	89
	Colon & Rectum	202	Oral Cavity & Pharynx	39	Corpus Uteri	38
	Kidney & Renal Pelvis	61	Kidney & Renal Pelvis	38	Non-Hodgkin's Lymphoma	25
Lafayette	All Cancers	3,672	All Cancers	1,890	All Cancers	1,782
	Lung	589	Prostate	483	Breast	583
	Breast	585	Lung	354	Lung	235
	Prostate	483	Colon & Rectum	231	Colon & Rectum	175
	Colon & Rectum	406	Bladder	101	Corpus Uteri	72
	Non-Hodgkin's Lymphoma	144	Non-Hodgkin's Lymphoma	74	Non-Hodgkin's Lymphoma	70
St. Landry	All Cancers	2,089	All Cancers	1,125	All Cancers	964
	Lung	373	Prostate	309	Breast	293
	Prostate	309	Lung	222	Lung	151
	Breast	299	Colon & Rectum	130	Colon & Rectum	102
	Colon & Rectum	232	Bladder	64	Pancreas	48
	Pancreas	86	Pancreas	38	Non-Hodgkin's Lymphoma / Corpus Uteri	34*
St. Martin	All Cancers	949	All Cancers	548	All Cancers	401
	Lung	193	Prostate	162	Breast	104
	Prostate	162	Lung	128	Lung	65
	Breast	104	Colon & Rectum	58	Colon & Rectum	45
	Colon & Rectum	103	Bladder	25	Corpus Uteri	23
	Bladder	36	Pancreas	21	Cervix Uteri	19
Vermilion	All Cancers	1300	All Cancers	726	All Cancers	574
	Prostate	237	Prostate	237	Breast	159
	Lung	213	Lung	131	Lung	82
	Breast	162	Colon & Rectum	72	Colon & Rectum	62
	Colon & Rectum	134	Bladder	28	Skin Melanomas / Non-Hodgkin's Lymphoma	26*
	Non-Hodgkin's Lymphoma	52	Non-Hodgkin's Lymphoma	26	Corpus Uteri	22
Region 5	All Cancers	6,374	All Cancers	3,447	All Cancers	2,927
	Lung	1,075	Prostate	1,018	Breast	869
	Prostate	1,018	Lung	669	Lung	406
	Breast	873	Colon & Rectum	365	Colon & Rectum	372
	Colon & Rectum	737	Bladder	193	Corpus Uteri	128
	Non-Hodgkin's Lymphoma	282	Non-Hodgkin's Lymphoma	154	Non-Hodgkin's Lymphoma	120
Allen	All Cancers	473	All Cancers	269	All Cancers	204
	Lung	94	Prostate	69	Breast	58
	Prostate	69	Lung	67	Colon & Rectum	34
	Colon & Rectum	63	Colon & Rectum	29	Lung	27
	Breast	58	Non-Hodgkin's Lymphoma	13	Cervix Uteri	8
	Non-Hodgkin's Lymphoma	20	Kidney & Renal Pelvis / Bladder / Leukemias	10*	Pancreas / Bladder / Oral Cavity & Pharynx / Corpus Uteri / Non-H. Lymphoma	7*

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
Beauregard	All Cancers	738	All Cancers	394	All Cancers	344
	Lung	121	Prostate	117	Breast	93
	Prostate	117	Lung	72	Lung	49
	Breast	94	Colon & Rectum	44	Colon & Rectum	40
	Colon & Rectum	84	Bladder	38	Corpus Uteri	17
	Bladder	47	Non-Hodgkin's Lymphoma	20	Skin Melanomas	15
Calcasieu	All Cancers	4,301	All Cancers	2,318	All Cancers	1,983
	Lung	705	Prostate	700	Breast	601
	Prostate	700	Lung	434	Lung	271
	Breast	602	Colon & Rectum	250	Colon & Rectum	263
	Colon & Rectum	513	Bladder	115	Non-Hodgkin's Lymphoma	94
	Non-Hodgkin's Lymphoma	198	Non-Hodgkin's Lymphoma	104	Skin Melanomas	81
Cameron	All Cancers	181	All Cancers	92	All Cancers	89
	Lung	39	Lung	24	Breast	26
	Breast	28	Prostate	23	Lung	15
	Prostate	23	Bladder	8	Colon & Rectum	11
	Colon & Rectum	18	Colon & Rectum	7	Ovary	7
	Bladder	9	Pancreas	**	Cervix Uteri	**
Jefferson Davis	All Cancers	681	All Cancers	374	All Cancers	307
	Lung	116	Prostate	109	Breast	91
	Prostate	109	Lung	72	Lung	44
	Breast	91	Colon & Rectum	35	Colon & Rectum	24
	Colon & Rectum	59	Bladder	22	Corpus Uteri	20
	Bladder	28	Non-Hodgkin's lymphoma	15	Pancreas	15
Region 6	All Cancers	6,567	All Cancers	3,571	All Cancers	2,996
	Lung	1,222	Prostate	882	Breast	849
	Prostate	882	Lung	770	Lung	452
	Colon & Rectum	862	Colon & Rectum	475	Colon & Rectum	387
	Breast	857	Bladder	193	Non-Hodgkin's Lymphoma	127
	Non-Hodgkin's Lymphoma / Bladder	256*	Non-Hodgkin's Lymphoma	129	Corpus Uteri	110
Avoyelles	All Cancers	961	All Cancers	531	All Cancers	430
	Lung	173	Lung	109	Breast	116
	Colon & Rectum	146	Prostate	107	Lung	64
	Breast	116	Colon & Rectum	85	Colon & Rectum	61
	Prostate	107	Bladder	31	Non-Hodgkin's Lymphoma / Cervix Uteri	19*
	Non-Hodgkin's Lymphoma	39	Kidney & Renal Pelvis	27	Corpus Uteri	17
Catahoula	All Cancers	232	All Cancers	129	All Cancers	103
	Lung	45	Prostate	32	Breast	24
	Prostate	32	Lung	27	Lung	18
	Breast / Colon & Rectum	24*	Colon & Rectum	11	Colon & Rectum	13
	Bladder / Non-Hodgkin's Lymphoma	11*	Bladder	8	Non-Hodgkin's Lymphoma / Pancreas	5*
	Pancreas	10	Non-Hodgkin's Lymphoma	6	Corpus Uteri	**

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
Concordia	All Cancers	405	All Cancers	215	All Cancers	190
	Lung	93	Lung	55	Breast	44
	Colon & Rectum	52	Prostate	47	Lung	38
	Prostate	47	Colon & Rectum	29	Colon & Rectum	23
	Breast	45	Pancreas	14	Ovary / Kidney & Renal Pelvis	10
	Pancreas	24	Leukemias	8	Pancreas / Cervix Uteri	9
Grant	All Cancers	413	All Cancers	226	All Cancers	187
	Lung	90	Lung	57	Breast	58
	Breast	59	Prostate	54	Lung	33
	Colon & Rectum	57	Colon & Rectum	27	Colon & Rectum	30
	Prostate	54	Bladder	15	Non-Hodgkin's Lymphoma	8
	Non-Hodgkin's Lymphoma	20	Non-Hodgkin's Lymphoma	12	Pancreas	7
La Salle	All Cancers	395	All Cancers	218	All Cancers	177
	Prostate	72	Prostate	72	Breast	45
	Lung	69	Lung	43	Lung	26
	Colon & Rectum	50	Colon & Rectum	27	Colon & Rectum	23
	Breast	45	Bladder	13	Corpus Uteri	11
	Bladder	17	Oral Cavity & Pharynx	7	Cervix Uteri	7
Rapides	All Cancers	2,926	All Cancers	1,591	All Cancers	1,335
	Lung	503	Prostate	418	Breast	418
	Breast	423	Lung	310	Lung	193
	Prostate	418	Colon & Rectum	232	Colon & Rectum	162
	Colon & Rectum	394	Bladder	77	Non-Hodgkin's Lymphoma	60
	Non-Hodgkin's Lymphoma	108	Pancreas	58	Cervix Uteri	47
Vernon	All Cancers	798	All Cancers	427	All Cancers	371
	Lung	178	Lung	119	Breast	100
	Breast	100	Prostate	79	Lung	59
	Colon & Rectum	83	Colon & Rectum	43	Colon & Rectum	40
	Prostate	79	Bladder	32	Ovary	18
	Bladder	43	Non-Hodgkin's Lymphoma	25	Corpus Uteri	14
Winn	All Cancers	437	All Cancers	234	All Cancers	203
	Prostate	73	Prostate	73	Breast	44
	Lung	71	Lung	50	Colon & Rectum	35
	Colon & Rectum	56	Colon & Rectum	21	Lung	21
	Breast	45	Bladder	14	Corpus Uteri	12
	Non-Hodgkin's Lymphoma	19	Non-Hodgkin's Lymphoma / Oral Cavity & Pharynx/Larynx	9*	Non-Hodgkin's Lymphoma / Skin Melanomas	10*
Region 7	All Cancers	12,056	All Cancers	6,443	All Cancers	5,613
	Prostate	1,986	Prostate	1,986	Breast	1,711
	Lung	1,952	Lung	1,226	Colon & Rectum	766
	Breast	1,729	Colon & Rectum	811	Lung	726
	Colon & Rectum	1,577	Bladder	317	Corpus Uteri	256
	Bladder	437	Oral Cavity & Pharynx	217	Ovary	202

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
Bienville	All Cancers	466	All Cancers	261	All Cancers	205
	Prostate	93	Prostate	93	Breast	66
	Lung	69	Lung	51	Colon & Rectum	31
	Breast	66	Colon & Rectum	32	Lung	18
	Colon & Rectum	63	Non-Hodgkin's Lymphoma	12	Corpus Uteri	9
	Non-Hodgkin's Lymphoma	18	Bladder	10	Cervix Uteri / Stomach / Non-Hodgkin's Lymphoma / Leukemias	6*
Bossier	All Cancers	1,908	All Cancers	1,004	All Cancers	904
	Lung	334	Prostate	281	Breast	272
	Prostate	281	Lung	198	Lung	136
	Breast	274	Colon & Rectum	138	Colon & Rectum	101
	Colon & Rectum	239	Bladder	55	Ovary	42
	Bladder	76	Kidney & Renal Pelvis	36	Non-Hodgkin's Lymphoma	38
Caddo	All Cancers	5,814	All Cancers	3,019	All Cancers	2,795
	Prostate	977	Prostate	977	Breast	868
	Lung	895	Lung	542	Colon & Rectum	379
	Breast	877	Colon & Rectum	373	Lung	353
	Colon & Rectum	752	Bladder	150	Corpus Uteri	137
	Bladder	218	Oral Cavity & Pharynx	112	Ovary	102
Claiborne	All Cancers	437	All Cancers	259	All Cancers	178
	Prostate	90	Prostate	90	Breast	62
	Breast	65	Lung	46	Colon & Rectum	24
	Lung	63	Colon & Rectum	24	Lung	17
	Colon & Rectum	48	Bladder	13	Corpus Uteri	11
	Non-Hodgkin's Lymphoma / Oral Cavity & Pharynx	15*	Oral Cavity & Pharynx	9	Non-Hodgkin's Lymphoma / Ovary	7*
De Soto	All Cancers	653	All Cancers	354	All Cancers	299
	Prostate	110	Prostate	110	Breast	95
	Lung	109	Lung	74	Colon & Rectum	43
	Breast	96	Colon & Rectum	45	Lung	35
	Colon & Rectum	88	Bladder	18	Corpus Uteri	14
	Bladder	25	Oral Cavity & Pharynx	13	Ovary	13
Natchitoches	All Cancers	772	All Cancers	404	All Cancers	368
	Prostate	118	Prostate	118	Breast	112
	Lung	114	Lung	70	Colon & Rectum	68
	Colon & Rectum / Breast	113*	Colon & Rectum	45	Lung	44
	Bladder	30	Bladder	24	Corpus Uteri	15
	Non-Hodgkin's Lymphoma	25	Oral Cavity & Pharynx / Non-Hodgkin's Lymphoma	16*	Pancreas	11
Red River	All Cancers	198	All Cancers	98	All Cancers	100
	Prostate	32	Prostate	32	Breast	26
	Colon & Rectum	31	Lung	16	Colon & Rectum	17
	Breast	26	Colon & Rectum	14	Lung	8
	Lung	24	Skin Melanomas	**	Corpus Uteri	7
	Corpus Uteri	7			Cervix Uteri	**

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
Sabine	All Cancers	586	All Cancers	341	All Cancers	245
	Lung	122	Lung	84	Breast	72
	Prostate	80	Prostate	80	Lung	38
	Breast	72	Colon & Rectum	46	Colon & Rectum	24
	Colon & Rectum	70	Bladder	19	Non-Hodgkin's Lymphoma	20
	Non-Hodgkin's Lymphoma	32	Kidney & Renal Pelvis	14	Cervix Uteri	10
Webster	All Cancers	1,222	All Cancers	703	All Cancers	519
	Lung	222	Prostate	205	Breast	138
	Prostate	205	Lung	145	Colon & Rectum	79
	Colon & Rectum	173	Colon & Rectum	94	Lung	77
	Breast	140	Bladder	27	Corpus Uteri	26
	Non-Hodgkin's Lymphoma	40	Kidney & Renal Pelvis	25	Non-Hodgkin's Lymphoma / Cervix Uteri	17*
Region 8	All Cancers	8,476	All Cancers	4,530	All Cancers	3,946
	Lung	1,534	Prostate	1,280	Breast	1,117
	Prostate	1,280	Lung	988	Lung	546
	Breast	1,132	Colon & Rectum	482	Colon & Rectum	497
	Colon & Rectum	979	Bladder	206	Corpus Uteri	178
	Non-Hodgkin's Lymphoma	308	Oral Cavity & Pharynx	173	Non-Hodgkin's Lymphoma	162
Caldwell	All Cancers	291	All Cancers	163	All Cancers	128
	Lung	62	Lung	43	Breast	32
	Colon & Rectum	42	Prostate	41	Colon & Rectum	26
	Prostate	41	Colon & Rectum	16	Lung	19
	Breast	33	Oral Cavity & Pharynx / Bladder	9*	Non-Hodgkin's Lymphoma	9
	Non-Hodgkin's Lymphoma	14	Skin Melanomas / Non-Hodgkin's Lymphoma	**	Pancreas	6
East Carroll	All Cancers	234	All Cancers	135	All Cancers	99
	Lung / Prostate	39*	Prostate	39	Breast	24
	Colon & Rectum	36	Lung	27	Lung / Colon & Rectum	12*
	Breast	24	Colon & Rectum	38	Thyroid / Cervix Uteri	6*
	Oral Cavity & Pharynx	10	Oral Cavity & Pharynx	8	Pancreas	5
	Bladder	9	Bladder	7	Corpus Uteri	**
Franklin	All Cancers	554	All Cancers	306	All Cancers	248
	Lung	107	Prostate	92	Breast	56
	Prostate	92	Lung	66	Lung	41
	Colon & Rectum	66	Colon & Rectum	38	Colon & Rectum	28
	Breast	56	Bladder	13	Pancreas	13
	Pancreas	21	Oral Cavity &B Pharynx	9	Corpus Uteri	11
Jackson	All Cancers	451	All Cancers	239	All Cancers	212
	Lung	80	Prostate	64	Breast	61
	Prostate	64	Lung	51	Colon & Rectum / Lung	29
	Breast	62	Colon & Rectum	22	Non-Hodgkin's Lymphoma	9
	Colon & Rectum	51	Bladder	21	Pancreas / Cervix Uteri	8*
	Bladder	25	Skin Melanomas	8	Ovary / Corpus Uteri / Skin Melanomas	7*

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
Lincoln	All Cancers	871	All Cancers	472	All Cancers	399
	Prostate	137	Prostate	137	Breast	129
	Lung	132	Lung	90	Colon & Rectum	44
	Breast	129	Colon & Rectum	47	Lung	42
	Colon & Rectum	91	Skin Melanomas	26	Corpus Uteri	24
	Skin Melanomas	44	Oral Cavity & Pharynx / Non-Hodgkin's Lymphoma	21*	Skin Melanomas	18
Madison	All Cancers	255	All Cancers	147	All Cancers	108
	Lung	52	Prostate	47	Breast	21
	Prostate	47	Lung	33	Lung	19
	Colon & Rectum	29	Colon & Rectum	14	Colon & Rectum	15
	Breast	21	Esophagus	10	Cervix Uteri	7
	Esophagus	13	Oral Cavity & Pharynx	6	Bladder	**
Morehouse	All Cancers	856	All Cancers	467	All Cancers	389
	Prostate	152	Prostate	152	Breast	120
	Lung	149	Lung	101	Colon & Rectum	56
	Breast	122	Colon & Rectum	48	Lung	48
	Colon & Rectum	104	Non-Hodgkin's Lymphoma	19	Corpus Uteri	14
	Non-Hodgkin's Lymphoma	32	Bladder	14	Non-Hodgkin's Lymphoma	13
Ouachita	All Cancers	3,231	All Cancers	1,648	All Cancers	1,583
	Lung	588	Prostate	453	Breast	459
	Breast	466	Lung	361	Lung	227
	Prostate	453	Colon & Rectum	172	Colon & Rectum	192
	Colon & Rectum	364	Skin Melanomas	70	Corpus Uteri	79
	Skin Melanomas	125	Bladder	70	Non-Hodgkin's Lymphoma	62
Richland	All Cancers	580	All Cancers	320	All Cancers	260
	Lung	107	Prostate	82	Breast	68
	Prostate	82	Lung	68	Lung	39
	Breast	70	Colon & Rectum	29	Colon & Rectum	28
	Colon & Rectum	57	Bladder	27	Non-Hodgkin's Lymphoma	13
	Bladder	31	Leukemias	15	Corpus Uteri / Ovary	12*
Tensas	All Cancers	155	All Cancers	84	All Cancers	71
	Lung	32	Prostate	29	Breast	18
	Prostate	29	Lung	19	Lung	13
	Colon & Rectum	25	Colon & Rectum	13	Colon & Rectum	12
	Breast	18	Leukemias / Larynx/ Pancreas	**	Non-Hodgkin's Lymphoma	**
	Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma	**			Kidney & Renal Pelvis	**
Union	All Cancers	648	All Cancers	355	All Cancers	293
	Lung	132	Lung	89	Breast	89
	Breast	91	Prostate	86	Lung	43
	Prostate	86	Colon & Rectum	41	Colon & Rectum	37
	Colon & Rectum	78	Oral Cavity & Pharynx	26	Non-Hodgkin's Lymphoma	14
	Skin Melanomas	30	Skin Melanomas	18	Ovary / Skin Melanomas / Thyroid	12*

Top Five Cancers and Number Of Cases Diagnosed In Louisiana
By Region And Parish, 1996-2000
Five-Year Case Counts—Invasive Cases Only

Region / Parish	Total		Males		Females	
West Carroll	All Cancers	350	All Cancers	194	All Cancers	156
	Prostate	58	Prostate	58	Breast	40
	Lung	54	Lung	40	Colon & Rectum	18
	Breast	40	Colon & Rectum	18	Lung	14
	Colon & Rectum	36	Oral Cavity & Pharynx	12	Non-Hodgkin's Lymphoma	11
	Non-Hodgkin's Lymphoma	18	Bladder	11	Skin Melanomas	8
Region 9	All Cancers	8,963	All Cancers	4,809	All Cancers	4,154
	Lung	1,513	Prostate	1,373	Breast	1,303
	Prostate	1,373	Lung	932	Lung	581
	Breast	1,317	Colon & Rectum	560	Colon & Rectum	480
	Colon & Rectum	1,040	Bladder	256	Non-Hodgkin's Lymphoma	164
	Bladder	355	Kidney & Renal Pelvis	173	Corpus Uteri	159
Livingston	All Cancers	1,611	All Cancers	864	All Cancers	747
	Lung	299	Prostate	238	Breast	220
	Prostate	238	Lung	187	Lung	112
	Breast	222	Colon & Rectum	79	Colon & Rectum	95
	Colon & Rectum	174	Bladder	55	Non-Hodgkin's Lymphoma	31
	Bladder	69	Oral Cavity & Pharynx	39	Corpus Uteri	27
St. Helena	All Cancers	132	All Cancers	72	All Cancers	60
	Prostate	29	Prostate	29	Breast	17
	Lung	20	Lung	10	Lung	10
	Breast	17	Colon & Rectum	7	Colon & Rectum	6
	Colon & Rectum	13	Larynx / N.H. Lymphoma/ Pancreas / Mult. Myeloma	**	Thyroid	**
	Larynx / Non-H.Lymphoma / Multiple Myeloma	**				
St. Tammany	All Cancers	3,914	All Cancers	2,082	All Cancers	1,832
	Breast	616	Prostate	604	Breast	610
	Prostate	604	Lung	338	Lung	258
	Lung	596	Colon & Rectum	257	Colon & Rectum	188
	Colon & Rectum	445	Bladder	128	Non-H. Lymphoma / Ovary	75*
	Bladder	182	Kidney & Renal Pelvis	80	Corpus Uteri	72
Tangipahoa	All Cancers	2,078	All Cancers	1,139	All Cancers	939
	Lung	360	Prostate	301	Breast	297
	Prostate	301	Lung	238	Lung	122
	Breast	300	Colon & Rectum	147	Colon & Rectum	116
	Colon & Rectum	263	Bladder	51	Ovary / Non-H. Lymphoma	36*
	Non-Hodgkin's Lymphoma	75	Non-Hodgkin's Lymphoma	39	Corpus Uteri	34
Washington	All Cancers	1,228	All Cancers	652	All Cancers	576
	Lung	238	Prostate	201	Breast	159
	Prostate	201	Lung	159	Lung	79
	Breast	162	Colon & Rectum	70	Colon & Rectum	75
	Colon & Rectum	145	Non-Hodgkin's Lymphoma	24	Corpus Uteri	24
	Non-Hodgkin's Lymphoma	44	Bladder / Kidney & Renal Pelvis	21	Ovary	22

* Number of cases is the same at each site.
** Contents of cells containing five or fewer cases are suppressed for reasons of confidentiality.

F. CHRONIC DISEASES: ASSOCIATED RISK FACTORS

1. CARDIOVASCULAR DISEASE: RISK FACTORS

Cardiovascular diseases (CVDs) are a group of diseases of the heart and blood vessels, including coronary heart disease (CHD), the disease that leads to heart attack, and diseases of the blood vessels that lead to stroke or hemorrhage. CVDs are the leading cause of death for both men and women in all racial and ethnic groups in Louisiana and the United States. Almost 1 million people in the United States die of CVDs each year, accounting for more than 40 percent of all deaths.[4] In Louisiana, CVDs caused 14,977 deaths in 2000, which accounted for 36 percent of all deaths that year.[5]

In addition to the approximately 15,000 Louisiana residents that die from CVDs each year, many more state residents experience a heart attack, stroke, or other non-fatal cardiovascular event. For most of these CVD survivors, their lives have changed forever: the majority will need medications for the rest of their lives, and some are left with permanent, severe disabilities such as the loss of speech or the inability to move an arm or leg.

Some CVD risk factors cannot be changed, such as age (CVD mortality increases with age), sex (males have higher CVD mortality rates than women, especially before menopause), race (blacks generally have higher rates than whites), and a family history of heart attacks at a young age.

However, most CVD risk factors are modifiable, meaning that individuals can change their behavior to slow, or even reverse, the process of arterial blockage and decrease their risk of having a heart attack or stroke. The modifiable risk factors include tobacco use, high blood pressure, high blood cholesterol, lack of regular physical activity, overweight/obesity, poor nutrition, and diabetes.[6]

1.1 Tobacco

1.1.1 Cigarette Smoking

Cigarette smoking was the leading risk factor for disease, responsible for an estimated 6,427 deaths and 96,085 years of potential years of life lost in 1999[7]. Furthermore, cigarette smoking is responsible for one in four deaths due to CVDs and contributes to illness and death due to cancers, respiratory diseases,

4 American Heart Association, 2002 Heart and Stroke Statistical Update. Dallas: AHA, 2000.

5 Nannapaneni S, Hsueh Y, Cheng J. The 2002 State of the Heart and Stroke Report. Louisiana Office of Public Health. Division of Health Protection and Promotion and the American Heart Association, Southeast Affiliate, June 2002.

6 Nannapaneni S, Hsueh Y, Cheng J. The 2002 State of the Heart and Stroke Report. Louisiana Office of Public Health. Division of Health Protection and Promotion and the American Heart Association, Southeast Affiliate, June 2002.

7 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999.

premature and low birth weight infants, sudden infant death syndrome, and burns.[7] More than 750,000 adults,[8] 79,000 high school,[9] and 28,000 middle school[10] aged children in Louisiana currently smoke cigarettes. Smokers not only put their own lives at risk, but also affect the lives of people around them. The human and economic costs of cigarette smoking are substantial. Recent estimates show that the total direct and indirect costs for 1999 in Louisiana attributable to cigarette smoking stood at $2.81 billion or $645 per capita.[7]

1.1.1.1 Cigarette Smoking Among Adults

1.1.1.1.1 Prevalence of Cigarette Smoking among Adults

Nearly one in four (24.6 percent) adults in Louisiana currently smokes cigarettes[8]. Rates of adult smoking in Louisiana have not changed significantly over the past decade and have consistently been above the national average (22.7 percent).

Rates of current smoking are higher among males, whites, Hispanics, individuals in the 18 - 44 year age group, individuals with annual household income less than $15,000 and in individuals with less than a high school level of education.

Demographic Profile of Current Smokers									
Age	**% Who Currently Smoke**	**Sex**	**% Who Currently Smoke**	**Race**	**% Who Currently Smoke**	**Income**	**% Who Currently Smoke**	**Education**	**% Who Currently Smoke**
18-24	28.5	**Male**	28.7	**White**	25.7	**Less than $15,000**	31.5	**Less than H.S.**	32.0
25-44	29.0	**Female**	21.0	**Black**	21.4	**$15,000-$24,999**	29.9	**H.S. or G.E.D.**	28.2
45-64	24.5			**Hispanic**	28.9	**$25,000-$49,999**	25.9	**Some post-H.S.**	24.6
65+	11.8					**$50,000+**	18.2	**College Graduate**	14.1

Source: Louisiana Department of Health and Hospitals Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2001

1.1.1.1.2 Smoking Cessation among Adults

The best way to avoid the undue consequences of smoking is to never start smoking. However, reduction in disease rates among current smokers is best achieved only through cessation. Smoking cessation has major and immediate health benefits for individuals of all ages. Smoking cessation is

8 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS) – 2001.

9 Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System (YRBS) – Louisiana, 1997.

10 Tobacco Control Program, Office of Public Health, Louisiana Department of Health and Hospitals. Louisiana Youth Tobacco Survey – 2000.

known to reduce the risk of lung cancer, other cancers, cardiovascular disease and chronic lung disease. Research shows that:[11]

- Individuals who quit before 50 years of age have a 50 percent reduction in the risk of dying in the next 15 years compared with continuing smokers.
- The risk of lung cancer declines steadily in people who quit smoking, with a 30 to 50 percent reduction in the risk after 10 years, compared to the risk for those who continue smoking.
- There is a 50 percent reduction in the risk of cardiovascular disease after 1 year in those who quit smoking and after 15 years, their risk equals that of non-smokers

In the readiness-to-change model, smoking cessation is viewed as a process of change with five stages: pre-contemplation, contemplation, preparation, action and maintenance. Results from the 2001 BRFSS show that approximately 640,000 adult Louisianans have quit smoking. Furthermore, an additional 500,000 have tried to quit smoking for at least one day in the past year. Trend data over the past five years (1997 – 2001) show a gradual increase in the proportion of adults who are trying to give up the deadly habit, from 49.0 to 56.5 percent.

1.1.1.2 Cigarette Smoking among Youth

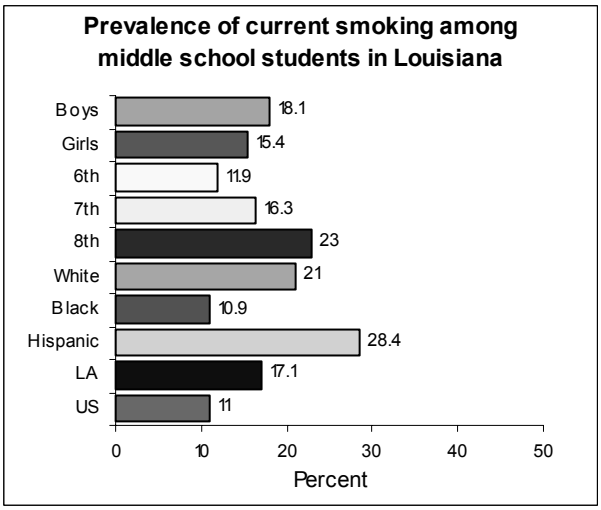
Nine out of ten current smokers started before they were 18 years of age. The younger one begins to smoke, the more likely one is to remain a smoker as an adult. Health problems associated with smoking are a function of the duration (years) and the intensity (amount) of use.[12] Earlier onset of tobacco use also provides more life-years to use tobacco and thereby increases the potential duration of use and the risk of a range of more serious health consequences.[12] Tobacco use is considered a part of the continuum of high-risk behaviors, which include the use of illegal drugs and anti-social behavior. These problem behaviors can be considered a syndrome, since involvement in one behavior increases the risk for involvement in others.[12] Delaying or preventing the use of tobacco may have implications for delaying or preventing these other behaviors as well.[12]

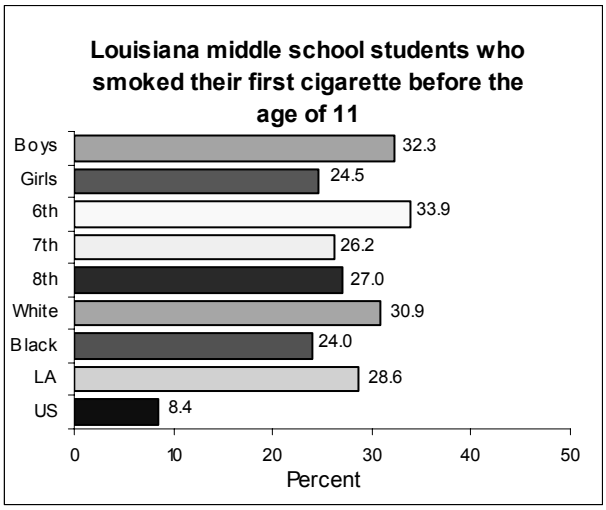
11 U.S. Department of Health and Human Services. The health benefits of smoking cessation: a report of the Surgeon General, Atlanta: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1990.

12 U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young People – A Report of the Surgeon General: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.

1.1.1.2.1 Prevalence of Cigarette Smoking among Youth

Results from the 2000 Louisiana Youth Tobacco Survey (YTS) show that more than 70,000 (50.0 percent) public middle school students in Louisiana reported having ever smoked a cigarette, and nearly one in four (17.1 percent) currently smoke cigarettes. Moreover, more than a fourth (28.6 percent) of the





Source: 2000 Louisiana Youth Tobacco Survey, Louisiana Tobacco Control Program, Louisiana Office of Public Health

students had smoked their first cigarette before the age of 11. Apart from cigarette smoking, other forms of tobacco use reported by middle school students include cigars (12.5 percent), pipes (6.3 percent), bidis (small brown cigarettes from India consisting of tobacco wrapped in a leaf and tied with a thread) (7.1 percent), and smokeless or chewing tobacco (9.9 percent). The rates of cigarette smoking and use of other tobacco products increase with each increasing school grade. Furthermore, white and Hispanic students have higher rates of cigarette smoking compared to black students. Rates of current smoking among middle school students in Louisiana are 50 percent higher than those of their peers are nationally.

Sales of tobacco products to children under the age of 18 years are illegal and punishable by law in all 50 states and the District of Columbia. However, underage tobacco sales continue to be a major source of tobacco for minors. Nearly one in two (46.8 percent) middle school students (under the age of 18) who reported currently smoking cigarettes bought their last pack of cigarettes from a gas station, convenience, grocery, or drug store. Results from the same survey also show that 70.5 percent of the middle school aged current smokers who bought cigarettes in a store were not asked to show proof of age when buying cigarettes during the 30 days preceding this survey. In addition, a greater proportion of white students (76.0 percent) reported not being asked for proof of age as compared to black students (55.5 percent).

1.1.1.2.2 Smoking Cessation among Youth

The continuum of smoking behavior among children and adolescents can be described in five stages: preparation, initial trying, experimentation, regular smoking, and nicotine dependence or addiction.

Persons who have smoked can discontinue at any stage, but quitting becomes more difficult as smokers progress through the continuum and become increasingly dependent on nicotine. One out of three (75.3 percent) middle school children who are current smokers think they would be able to quit smoking if they wanted to, however, only one out of two (53.8 percent) current smokers wanted to quit. Desire to quit smoking was shown to decrease with each additional school grade. Current smokers in the sixth grade were more likely to state that they wanted to quit smoking, as compared to eighth graders (61.0 percent and 47.3 percent, respectively).

1.1.1.3 Cigarette Smoking among Pregnant Women

Smoking during pregnancy is associated with increased risks for pregnancy complications, premature rupture of membranes, and modest increase in risk for pre-term delivery. Evidence shows that maternal tobacco use is associated with low birthweight, mental retardation and birth defects such as oral clefts in the newborn. Research suggests that intrauterine exposure and passive exposure to secondhand smoke after birth are associated with an increased risk of Sudden Infant Death Syndrome (SIDS) in infants.[13] According to the 2000 Louisiana Pregnancy Risk Assessment and Monitoring System (LaPRAMS) data, an estimated total of 7651 (12.1 percent) pregnant women (with live births) in Louisiana smoked during the last three months of pregnancy. Higher rates of smoking during pregnancy were observed among whites compared to blacks (17.1 percent vs. 5.2 percent), women with less than high school level of education compared to those with those with a college degree (19.3 vs. 4.5 percent), and women who are married compared to those who are not (13.8 percent vs. 10.4 percent). Smoking during pregnancy was responsible for nearly one in five births (18.0 percent) being less than 2500 grams (low birthweight).

Smoking during pregnancy not only poses an enormous amount of risk to the developing fetus but also results in an inordinate amount of economic burden on the health care system. In 1999, neonatal expenditures attributable to maternal smoking during pregnancy in Louisiana stood at $ 5.3 million. Smoking during pregnancy resulted in an estimated 1,550 years of potential life lost due to premature mortality among infants[14].

1.1.2. Smokeless Tobacco

Smokeless tobacco (chewing or spit tobacco) can also lead to nicotine addiction, oral cancer, gum disease, and an increased risk of cardiovascular disease, including heart attacks.

13 U.S. Department of Health and Human Services. Women and smoking – A Report of the Surgeon General: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2001.
14 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999.

1.1.2.1 Use of Smokeless Tobacco among Adults

According to 2000 BRFSS data, 15.7 percent of the adult population in Louisiana has ever used smokeless tobacco products such as chewing tobacco, dip or snuff. Overall, three percent of the adult population currently uses smokeless tobacco products.

Demographic Profile of Current Smokeless Tobacco Users									
Age	**% Who Use Smokeless Tobacco**	**Sex**	**% Who Use Smokeless Tobacco**	**Race**	**% Who Use Smokeless Tobacco**	**Income**	**% Who Use Smokeless Tobacco**	**Education**	**% Who Use Smokeless Tobacco**
18-24	5.7	**Male**	6.7	**White**	4.5	**Less than $15,000**	3.7	**Less than H.S.**	4.5
25-44	3.2	**Female**	0.6	**Black**	1.3	**$15,000-$24,999**	1.9	**H.S. or G.E.D.**	2.9
45-64	3.2					**$25,000-$49,999**	4.1	**Some post-H.S.**	3.9
65+	2.5					**$50,000+**	4.2	**College Graduate**	3.2

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2000

1.1.2.2 Use of Smokeless Tobacco among Youth

Use of smokeless tobacco products among youth in Louisiana appears to be widely prevalent. Results from the 2000 YTS show that more than one in two (56.1 percent) middle school students have used smokeless tobacco products before the age of 11 years. One in ten (9.9 percent) middle school students currently use smokeless tobacco products. Significantly higher rates of use were observed among boys compared to girls (15.8 percent vs. 3.2 percent) and white students compared to blacks (12.8 percent vs. 5.4 percent).

1.1.3 Environmental Tobacco Smoke

There is a growing body of evidence to support the harmful effect of exposure to Environmental Tobacco Smoke (ETS) or second-hand smoke. ETS is classified as a Group A carcinogen under the United States Environmental Protection Agency's (EPA) carcinogen assessment guidelines. Exposure to ETS causes lung cancer and has been linked to an increased risk for heart disease in nonsmokers. ETS is also known to cause irritation of the conjunctiva of the eyes and the mucous membranes of the nose, throat, and lower respiratory tract.[15] Provision of completely smoke-free environments is the most effective method for reducing ETS exposure.

15 EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

1.1.3.1 ETS Exposure at home

Results from the 2001 BRFSS survey show that nearly one in three adults (30.4 percent) in Louisiana allow smoking indoors or did not have any rules about smoking inside the house.

Demographic Profile of Adults who Allow Smoking Indoors									
Age	**% Who Allow Smoking**	**Sex**	**% Who Allow Smoking**	**Race**	**% Who Allow Smoking**	**Income**	**% Who Allow Smoking**	**Education**	**% Who Allow Smoking**
18-24	32.8	**Male**	31.7	**White**	28.6	**Less than $15,000**	40.8	**Less than H.S.**	40.2
25-44	29.6	**Female**	29.4	**Black**	35.6	**$15,000-$24,999**	34.1	**H.S. or G.E.D.**	35.1
45-64	31.9					**$25,000-$49,999**	32.8	**Some post-H.S.**	28.1
65+	28.1					**$50,000+**	19.4	**College Graduate**	18.8

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2001

1.1.3.2 ETS Exposure at work

Exposure to ETS in the workplace represents a substantial contribution to lifetime ETS exposure.
Results from the 2001 BRFSS survey show that, more than one out in four (28.1 percent) adults (who work indoors most of the time) report that smoking is allowed in some or all work areas or that there were no rules about smoking in their place of work. Blacks, individuals in the 18 - 24 year age group, individuals with an annual household income less than $25,000, and individuals with less than a high school education were more likely to report that their place of work did not prevent indoor smoking. These statistics highlight the increased level of health risk among a large proportion of individuals who are exposed to ETS on a daily basis at their places of work.

Demographic Profile of Adults whose Place of Work Does Not Prevent Smoking Indoors									
Age	**% Whose Work Allows**	**Sex**	**% Whose Work Allows**	**Race**	**% Whose Work Allows**	**Income**	**% Whose Work Allows**	**Education**	**% Whose Work Allows**
18-24	36.4	**Male**	34.7	**White**	25.8	**Less than $15,000**	34.2	**Less than H.S.**	50.9
25-44	30.4	**Female**	22.9	**Black**	33.4	**$15,000-$24,999**	35.3	**H.S. or G.E.D.**	37.0
45-64	23.0					**$25,000-$49,999**	30.4	**Some post-H.S.**	27.8
65+	9.0					**$50,000+**	20.4	**College Graduate**	15.0

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2001

1.1.3.3 Youth Exposure to Environmental Tobacco Smoke

Research has shown that children exposed to ETS are at an increased risk for SIDS, acute lower respiratory tract infections, asthma induction and exacerbation, and middle-ear effusions.[16]

Results from the most recent YTS show that, more than three out of four middle school students (84.5 percent) believe that exposure to ETS is harmful. Middle school students who are current smokers were less likely to believe that ETS exposure can be harmful, as compared to those who have never smoked (77.1 percent and 87.0 percent, respectively).

Nearly one in two middle school students (48.9 percent) currently lives with someone who smokes cigarettes. Middle school students who were smokers were significantly more likely to be living with someone who smoked, as compared to non-smokers, (66.7 percent and 33.7 percent respectively). One of out two middle school students (50.8 percent) in Louisiana rode in the car with someone smoking on at least one out of the seven days preceding the survey.

1.1.4 Impact of Tobacco Use

1.1.4.1 Morbidity and mortality

Results from the recent Smoking Attributable Morbidity, Mortality and Economic Costs (SAMMEC) study show that in 1999, cigarette smoking contributed to an estimated 6,427 deaths in Louisiana, accounting for 16.0 percent of all deaths in that year. Also, an estimated 96,085 Years of Potential Life were Lost (YPLL) as a result of the premature mortality resulting from cigarette smoking. Cancer was the leading cause of smoking-attributable YPLL in Louisiana in 1999, it was specifically responsible for 41,890 years of potential life lost (27,088 male and 14,802 female). Cardiovascular disease (CVD) caused a loss of 38,249 years (22,731 male and 15,518 female) of potential life, while respiratory diseases caused 15,948 years to be lost (8,118 male and 7,830 female).

1.1.4.2 Economic costs

Results from SAMMEC also estimate the total direct and indirect costs for 1999 in Louisiana attributable to cigarette smoking at $2.81 billion. Smoking attributable direct medical costs totaled $1.15 billion:

- $392 million for ambulatory care
- $308 million for hospitalizations
- $101 million for prescription drugs
- $268 million for nursing home services
- $82 million for other professional services

16 EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

Indirect costs due to loss of productivity resulting from the premature deaths for 1999 in Louisiana due to cigarette smoking were estimated at $1.66 billion. This included $731 million due to malignant neoplasms, $755 million due to CVD and $178 million due to respiratory diseases.

1.2 Overweight and Obesity

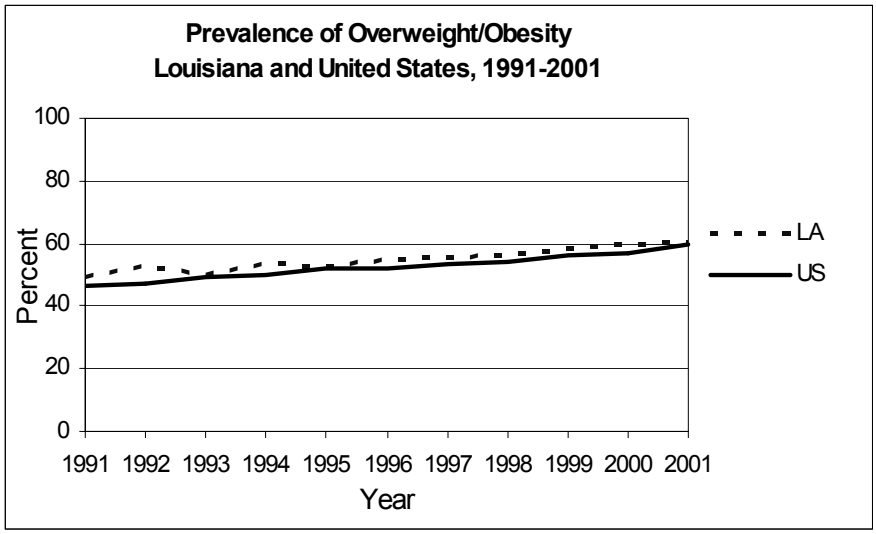
New Definitions:
Overweight - an adult with a BMI between 25.0-29.9 kg/m^2
Obesity - an adult with a BMI of 30 kg/m^2 or greater
Note: Because of these changes, readers may find earlier obesity/overweight figures that do not agree with those found in this report.

The three main factors that affect weight are: metabolism, food intake, and activity level. While some individuals may have underlying physical disorders that cause them to gain or lose too much weight, most people can control their weight by matching their food intake to their activity level. Even though an individual's Body Mass Index (BMI) is, for the most part, within his or her control, the percentage of people in the United States who are overweight or obese has been steadily and dramatically on the rise. Adult obesity in Louisiana rose from 16 percent in 1991 to 24 percent in 2001, with the largest jump seen in the 18 to 24 year old age group. Being overweight and or obese substantially increases the risk of hypertension, high cholesterol, type II diabetes (adult onset), heart disease, stroke, gallbladder disease, osteoarthritis, and various cancers.[17]

The body mass index (BMI) is an index of weight relative to height, which is used to estimate the amount of fat a person has on his or her body. Prior to 1995, the World Health Organization (WHO) defined overweight as a BMI equal to or greater than 27.8 for males, and a BMI equal to or greater than 27.3 for females. However, as evidence mounted that indicated an increased risk of morbidity and mortality for individuals with a BMI of 25.0 or greater, WHO responded by redefining overweight and obesity. According to current definitions, a person is defined as overweight if his or her BMI is between 25.0 and 29.9 and obese if their BMI is greater than 30.0. Because of this change, readers may find earlier obesity/overweight figures that do not agree with those found in this report and are therefore cautioned against comparing previously reported statistics with the numbers found here.

Overweight and obese adults are at increased risk for CVDs. Over the last decade (1991 - 2001), the percent of overweight and/or obese Louisiana residents increased from 49 percent to 60 percent.

17 Stunkard AJ, Wadden TA. (Editors) Obesity: Theory and therapy, Second Edition. New York: Raven Press, 1993.



Source: Louisiana Department of Health and Hospitals Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS

1.3 High Blood Pressure

High blood pressure, or hypertension, is a major risk factor for both heart disease and stroke. According to results from the 2001 BRFSS survey, one in four adult residents of Louisiana suffers from high blood pressure. The proportion of Louisiana residents with undiagnosed hypertension is unknown. Nationally, only two thirds of people with high blood pressure know they have it, one half are receiving treatment, and one fourth are under control. High blood pressure is a major risk factor for both coronary heart disease (CHD) and stroke.[18] It is important to ensure adequate control of high blood pressure through exercise, weight management, and medication.

1.4 High Cholesterol

Elevated cholesterol is one of the strongest risk factors associated with CHD.[18] Cholesterol plays a direct role in the atherosclerotic process, the disease process that underlies heart disease and stroke, where cholesterol accumulates on the arterial walls, building plaque and restricting blood flow. Low-density lipoprotein (LDL), the "bad cholesterol," clogs the arteries to the heart and increases the risk for heart disease. High-density lipoprotein (HDL), the "good cholesterol," decreases the risk for heart disease. A high total cholesterol level increases the risk for heart disease. Lowering high total blood cholesterol levels can decrease the likelihood of death from heart disease.

18 American Heart Association, Heart and Stroke Statistical Update, 2002. Dallas, TX: AHA, 2001.

The percentage of Louisiana adults (35 years and older) who have not had their blood cholesterol checked within the previous five years was 23 percent in 2000. Of persons who had ever been checked, the percentage who reported that they have high cholesterol was 31 percent in 2000.

1.5 Physical Inactivity

Regular physical activity is associated with significant health benefits and has been shown to decrease mortality and morbidity due to several diseases. The benefits of regular physical activity include, but are not limited to; reduction in the rates of heart disease, blood pressure, stroke, diabetes, osteoporosis, colon cancer, and mood disorders such as anxiety and depression. Regular physical activity also helps maintain body weight, aids in the management of osteoarthritis, and reduces the risk of falls and fractures.[19] Moderately intense physical activity such as a brisk walk or raking a lawn can provide the desired results. Although there is a wide variation in the recommended level of physical activity, the consensus is that at least 30 minutes of physical activity on at least five or more days a week is sufficient.

The vast majority of Louisiana residents are not physically active on a regular basis. Approximately 85 percent of Louisiana adults do not get regular physical activity (defined as engaging in at least 30 minutes of moderate-intensity activity, such as walking at a brisk pace, on five or more days a week).

1.6 Diet

Eating five or more servings of fruits or vegetables per day can help prevent heart disease, cancer, and other chronic conditions. In 2000, 85 percent of Louisianans reported that they did not consume at least five servings of fruits and vegetables per day.

2. DIABETES: MANAGEMENT

Persons who are obese, physically inactive, or members of ethnic minorities (blacks, Hispanic/Latino Americans, and American Indians) and those with a family history of diabetes or prior gestational diabetes, are at higher risk of acquiring diabetes. Diabetes mellitus (diabetes) is a serious chronic disease caused by either a shortage of insulin or a decreased ability to use insulin. Insulin is the hormone that allows glucose (sugar) to enter cells and be converted to energy. Uncontrolled, this deficiency leads to the damaging of vital organs, caused by the prolonged presence of glucose and fats in the blood.

Diabetes is a common and serious disease in Louisiana. It is a costly disease not only in terms of the economic burden it imposes on the state, but also in terms of the human suffering inflicted by the disease and its complications. In 2000, Louisiana had the highest death rate in the nation due to diabetes (42.2

19 U.S. Department of Health and Human Services. Physical Activity and Health: Report of the Surgeon General. Atlanta, GA: U.S. Department of health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

per 100,000 population). Diabetes is also the leading cause of blindness in adults aged 20 to 74 and the most common cause of non-traumatic amputations and end stage renal disease, accounting for approximately 40 percent of new cases of end stage renal disease nationwide.

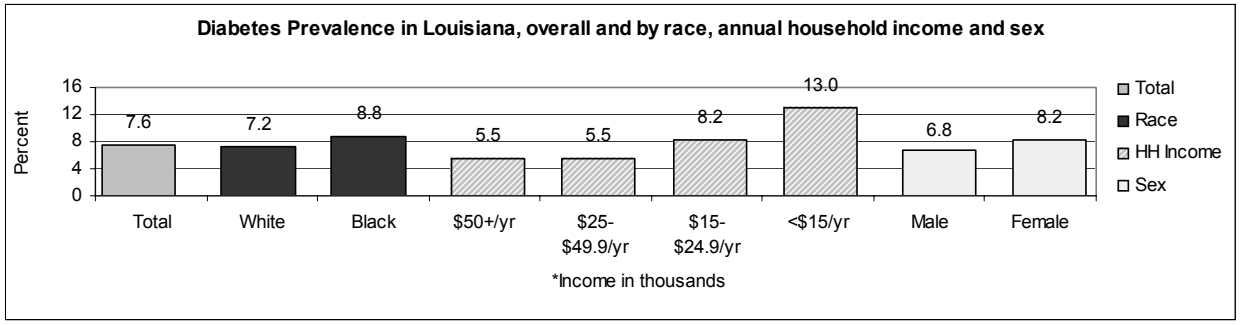
The total cost of diabetes in Louisiana, estimated for 1997, was over $2.2 billion. This cost, which reflects estimates derived from known cases of diabetes, is likely an underestimate, given that about one third of all diabetics are undiagnosed.

2.1 Prevalence

The overall prevalence of diabetes in Louisiana is currently 7.6 percent (BRFSS, 2001). There are, however, many demographic variables to account for when studying prevalence. Using BRFSS, these differences were identified for race, sex, age, and household income.

Data analysis showed, in 2001, that blacks (8.8 percent) have a higher prevalence of diabetes than whites (7.2 percent), and that adult women have a higher prevalence than men (8.2 percent vs. 6.9 percent). The likelihood of having diabetes increases with age among Louisiana residents, with the highest prevalence found among those 65 years or older (17.26 percent), and the lowest prevalence found in those under 45 years of age (2.6 percent).

In terms of household income, the prevalence of diabetes is higher for adults in Louisiana from households with lower total incomes, and for those with lower educational attainment. For persons living in households with a yearly income less than $15,000, the prevalence of diabetes is approximately 13 percent. The prevalence steadily decreases as the yearly income rises with the lowest prevalence for those with annual income of more than $50,000.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2001

2.2 Preventive Practices

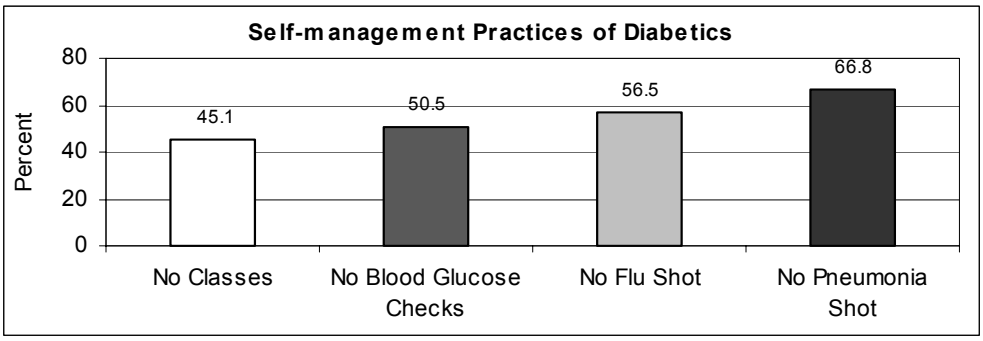
Reducing the burden of disease due to diabetes requires active and effective management of the disease, by both diabetics and those who treat them. For those affected by diabetes, following

recommended preventive and curative practices is the best way to ensure a good quality of life. These practices include self-management classes, monitoring blood glucose levels, and vaccinations for both influenza and pneumonia.

2.2.1 Self-Management Classes

A thorough understanding of diabetes is critical to knowing how to properly manage the disease. It is important for diabetics to be consistent with care and up to date on the best practices for management. For this reason, it is recommended that diabetics and their families take classes that teach self-management. An estimated 45 percent of Louisiana diabetics, however, have not yet taken such a course (BRFSS, 2000).

Older Louisiana diabetics (65 years and older), who are most vulnerable to morbidity, are the least likely to have taken a self-management course. In addition, more white diabetics (48 percent) than black diabetics (40 percent) reported that they have never taken a class on how to manage their diabetes, and more non-insulin users (50 percent) than insulin-users (35 percent) reported never having attended a class on how to manage their diabetes.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2001

2.2.2 Blood Glucose Monitoring

The most fundamental aspect of self-managing diabetes is keeping blood sugar levels within the normal range. Although diabetics are advised to monitor their blood glucose levels several times a day, it is crucial that they check the level at least once a day. When asked how often they checked their blood glucose levels in a day, over half (50.5 percent) of Louisiana's diabetics responded that they failed to check at least once daily.

2.2.3 Influenza

Because diabetics are more likely than non-diabetics to suffer from complications of influenza (flu), it is recommended that they get an annual flu shot as a necessary precaution. In 2000, more than half of Louisiana diabetics (57 percent) had not received a flu shot within the last year. In terms of race, 62.4 percent of black diabetics and 51.4 percent of white diabetics reported that they had not received an annual flu shot. Approximately 60 percent of diabetics under the age of 45 and 74.8 percent of diabetics ages 45 to 64 had not received a flu shot. The largest disparity exists between diabetics who are insulin dependent and those who are not; 63.8 percent of insulin users did not have a flu shot in the previous 12 months, while only 50.2 percent of non-insulin diabetics failed to receive the shot.

2.2.4 Pneumonia

Like the flu vaccine, pneumonia vaccinations are important to the health of diabetics. Nationally, however, only about one in three adults with diabetes ever gets a simple, safe pneumonia shot. A pneumonia shot every 10 years is recommended for anyone aged two years or older who might be at higher risk of getting pneumonia due to an existing chronic condition, such as diabetes. Unfortunately, 66.9 percent of diabetics in Louisiana reported never having received a pneumonia vaccination (BRFSS, 2000). This percentage was consistent, with little variation, across demographic boundaries.

2.3 Medical Office Visits

It is essential that persons with diabetes see a doctor or other health professional specifically for their diabetes. Diabetes has the unfortunate distinction of being one of the few chronic diseases that must be actively managed on a daily basis. The adult person affected must perform the tasks addressed earlier, such as daily monitoring of blood glucose, as well as ensure that he or she receive the recommended standard of care from their health care professional in terms of consultations, foot exams, and eye exams.

2.3.1 Hemoglobin A1c (HgA1c)

The HgA1c test is the most reliable method for determining average blood sugar levels over the previous three months. Diabetics are advised to have this test once every three months. Since the test provides the best indication of blood sugar over the previous three months, health professionals can make the necessary determination on how to proceed with care, including insulin adjustment. BRFSS analysis shows that of diabetics surveyed in 2000, only an estimated 56.5 percent reported that they had received even one HgA1c test in the previous year. About 50 percent of blacks and 39.6 percent of whites responded that they had not had the test even once in the previous year. When looking at annual household income, the relationship between testing and income level is almost directly proportional. Diabetics in the highest income bracket ($50,000+) have the lowest proportion not having received an

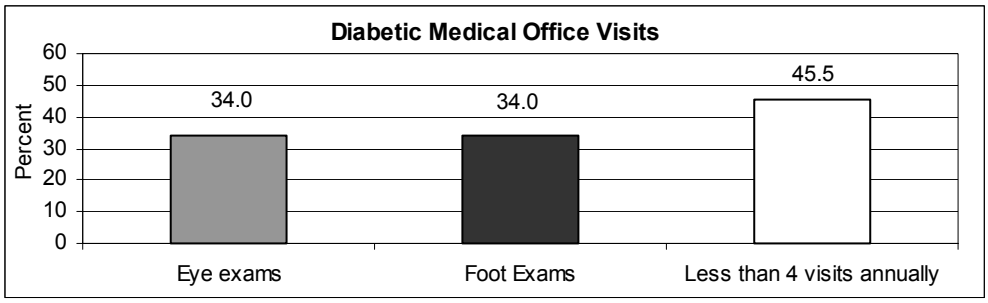
HgA1c annually at 24.7 percent. Those with a yearly income of $15,000 to $24,000, have the highest proportion at 54.4 percent, almost twice the rate of the former group, not receiving a HgA1C test annually.

2.3.2 Foot Examinations

Diabetics are asked to check their own feet regularly and to have them checked by a health professional at least once a year. While self-examinations of the feet allow the patient to catch any sore or cuts that might progress if undetected, medical professionals have the proficiency to, among other aspects of complications, detect signs of nerve damage and prescribe appropriate measures. Overall, more than one in three (34 percent) adult Louisiana diabetics did not receive a foot examination in the 12 months prior to the survey. Louisiana's white diabetics are about two-times as likely as black diabetics to report not receiving a foot exam (34.8 percent and 18.6 percent respectively). Another source of considerable disparity is between insulin users (19 percent) and non-users (34 percent), with the latter group more than twice as likely to report not receiving an annual foot examination than the former.

2.3.3 Eye Examinations

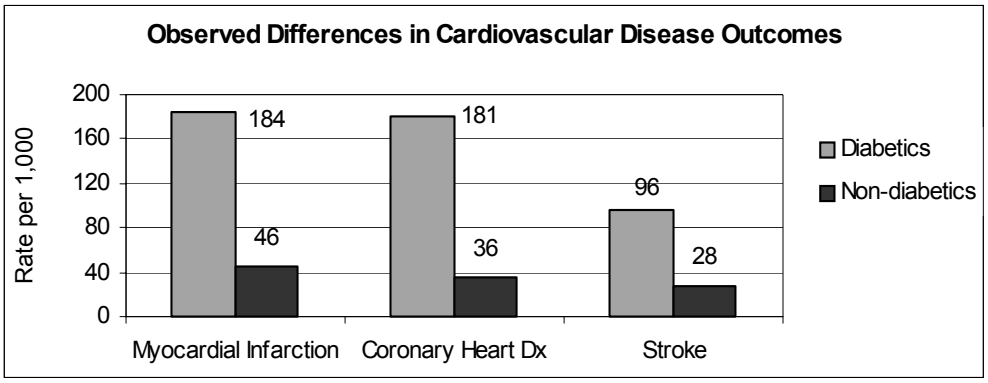
As well as having their feet checked, it is also important that diabetics have their eyes checked at least once a year, as diabetes has been proven to be the leading cause of new cases of blindness in adults aged 20 to 74. Annual eye examinations provide health care professionals with the possibility of early detection for signs of retinopathy, and allow appropriate measures to be taken. Overall, an estimated 34 percent of Louisiana diabetics did not have an eye examination in the previous year. Although there was a measure of consistency in the percentage of diabetics who did not receive eye examinations in most of the categories studied, the largest disparity was by age differences. Diabetics under the age of 45 constituted the highest percentage of people who had not gotten an eye examination at 46.9 percent, compared to 26.2 percent of those age 65 or older.



Source: Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS, 2000

2.4 Co-Risk Factors

Because diabetes causes damage to many vital organs over time, diabetics are at higher risk than non-diabetics for morbidity and mortality. To assess the extent to which diabetes does increase the risk of morbidity, three outcomes were selected for analysis, comparing the rates (per 1,000) between diabetics and non-diabetics. Louisiana diabetics were found to have about four times the risk for myocardial infarction that non-diabetics have, five times the risk for coronary heart disease, and three times the risk for stroke.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS, 2001

Reducing the burden of disease due to diabetes, therefore, requires monitoring diabetics on risk factors associated with other morbidity outcomes. Risk factors that may potentially speed the progression of disease in diabetics and impose excess morbidity include obesity, physical inactivity, hypertension, high cholesterol, and tobacco use. The following section examines the distribution of some important risk factors among Louisiana diabetics.

2.4.1 Overweight/Obesity

Overweight and obesity continue to be an area of particular relevance in the state. Thirty-six percent of Louisiana diabetics are overweight, and another 43 percent are obese. Hence, nearly 80 percent of all adult diabetics in Louisiana are at least overweight. Given the high proportion who are overweight or obese, the expectation would be that a high proportion of adult diabetics are trying to lose weight. Only 44 percent of the total diabetic population, however, reported in 2000 that they were trying to lose weight. Because the maintenance of an ideal body weight depends on lifestyle choices over which every individual has some measure of control, this is an area with considerable opportunity for worthwhile impact. The consumption of proper foods in moderation is essential to weight control. Unfortunately, 78 percent of Louisiana diabetics report consuming less than the recommended five portions of fruits and vegetables a day.

2.4.2 Physical Activity

Combined with a nutritionally balanced diet, moderate physical activity is critical for physiological balance and well-being. The BRFSS defines "any exercise" as participation, over the previous month, in any physical activities such as running, calisthenics, golf, gardening, or walking, outside of the duties of one's regular work. More than half (55 percent) of Louisiana diabetics reported that they had not exercised at all over the month prior to the survey. Diabetics on insulin (69 percent) and diabetics aged 65 and older (63 percent), who stand to benefit considerably from being moderately active, have the highest proportions of physical inactivity.

The benefits of physical activity are greater when activity is regular and sustained. The BRFSS defines regular and sustained activity as engaging in a physical activity or pair of physical activities for 30 minutes or more per session, five or more times per week, regardless of intensity. In Louisiana, about 90 percent of diabetics do not engage in regular and sustained activity as defined above.

2.4.3 Hypertension

In the absence of physical activity and a nutritious diet, many diabetics are in jeopardy of developing high blood pressure. The CDC reports that an estimated 60 to 65 percent of persons with diabetes have high blood pressure, placing them at increased risk for several morbidity outcomes, including heart attack and stroke. The overall rate of high blood pressure among Louisiana diabetics in 2000 was 62 percent, compared to a rate among non-diabetics of 24.8 percent. Black diabetics (73 percent) appear to be particularly affected by high blood pressure, relative to white diabetics (54 percent). Moreover, diabetics from households with the highest total income have the highest rates of high blood pressure (78.9 percent). For every category, however, the rate of high blood pressure among diabetics is at least twice the rate among non-diabetics.

2.4.4 Cholesterol

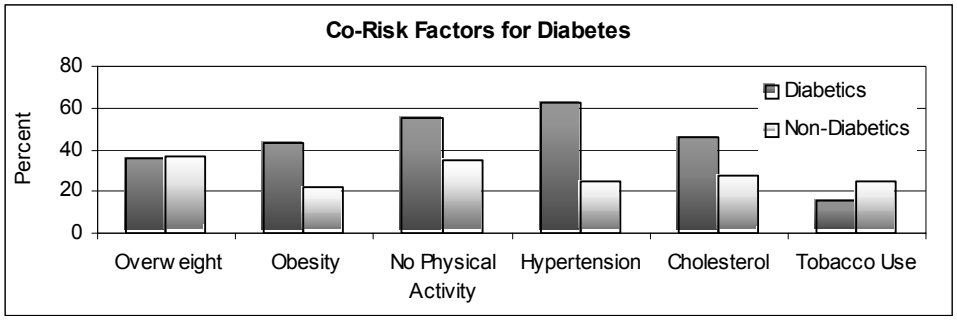
As with blood pressure, elevated blood cholesterol levels are associated with adverse cardiovascular outcomes for diabetics. Approximately 46 percent of all adult diabetics in Louisiana have high blood cholesterol. Among non-diabetics, the proportion with high blood cholesterol is 27.8 percent. Broken into demographic groups, diabetics who have the highest yearly income also have the largest prevalence of high cholesterol, followed by those with the lowest household income of less than $15,000 per year (51.6 percent vs. 50.5 percent).

2.4.5 Tobacco Use

Even without the complication of other chronic diseases, tobacco use is one of the most important risk factors for morbidity. Combined with the complications of other chronic diseases such as diabetes, it

greatly increases the risk of stroke and cardiovascular health problems. The prevalence of smoking among diabetics is estimated to be 16 percent.

For every category studied, non-diabetics have a higher smoking prevalence than diabetics, with one exception. For people age 65 and above, the prevalence of smoking is 8.3 percent for diabetics and 8.0 percent for non-diabetics. While it is encouraging that, for the most part, diabetics reported smoking less than the general public, the prevalence of smoking among diabetics is still high. Some of the greatest disparities are between the sexes, with 10.8 percent of diabetic females smoking and 23.6 percent of diabetic males smoking. Age provides another source of disparity, with younger diabetics proportionately more likely than older diabetics to be current smokers. The relationship between age and current smoking among Louisiana's adult diabetics shows a gradient decrease with age. The youngest group (<45 years) of Louisiana adult diabetics smokes at a rate (29 percent) which is almost two times the rate (17 percent) of the next age group (45 to 64 years), and more than three times the rate (8 percent) of the oldest age group (65 years and older). While diabetics are strongly advised not to smoke, smoking represents a risk factor that diabetics and non-diabetics alike must be encouraged to avoid.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2001

While it has been shown that diabetes is a very serious and costly disease, it is also preventable and even manageable. Because diabetes is a disease that responds to behavior modifications, self-management is very important. Surveillance systems such as the BRFSS and the Diabetes Prevention and Control Program are instrumental to identifying areas of need for increased emphasis (e.g., diabetes education) in an effort to reduce the morbidity and mortality of those affected by diabetes.

3. CANCER SCREENING

Cancer is a potentially fatal disease that affects millions of people in the United States every year. It is the second leading cause of death after cardiovascular disease.[20] Nevertheless, early detection of cancer will increase a person's chances of survival. The following discussion provides screening

20 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health statistics. Deaths: Leading Causes for 2000. NVSR Vol. 50; No. 16.

information for five of the most common forms affecting residents of the United States: breast, cervical, prostate, colorectal, and skin cancers.

3.1 Breast Cancer Screening

Except for skin cancer, breast cancer is the most commonly diagnosed cancer among women in the United States. It is second to lung cancer as the leading cause of cancer-related death. The American Cancer Society estimated that 39,600 women would die of breast cancer in 2002. Routine breast examinations by a health professional, or mammography and clinical breast examination (CBE) are the most effective ways of detecting breast cancer early and improving the chances of survival. All women aged 50 and older should undergo mammography, with or without a CBE, every one to two years. Nevertheless, the United States Preventive Services Task Force (USPSTF) indicates that women may begin breast cancer screening at age 40 with some added benefit. Women should discuss these options with their health care provider.

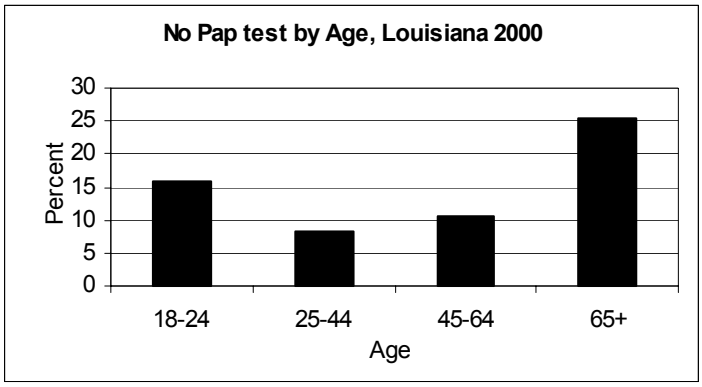
In the 2000 BRFSS, among Louisiana women aged 50 and older, 32.2 percent reported they had not had a mammogram and CBE within the two years before the survey. Black women (37.1 percent) were more likely than white women (30.1 percent) to report that they had not had a mammogram and CBE within the last two years. It is important to note that while white women are more likely to develop breast cancer, black women have a higher mortality rate from the disease. However, it is vital that all women aged 40 and older, regardless of race, be screened regularly for breast cancer.

The percentage of women, 50 years and older, not receiving the recommended breast cancer screening has drastically decreased from 1991 to 2000. Currently in Louisiana, over 67 percent of women in this age group receive a mammogram and CBE, which meets and exceeds the Healthy People 2000 goal of having 60 percent of the women aged 50 and over screened within the preceding two years. Women in the lowest socioeconomic tier (<$15,000 per year) are over twice as likely to be inadequately screened as women in the highest socioeconomic tier (>$50,000 per year).

3.2 Cervical Cancer Screening

The CDC recommends that, from the onset of sexual activity, but no later than their 18th birthday, women should receive a Papanicolaou (Pap) test annually to detect cervical cancer and precancerous lesions. After receiving normal results for three consecutive annual tests, physicians may decide to test less frequently. In the year 2002, the American Cancer Society projected that 13,000 new cases of cervical cancer would be detected. Early detection of cervical cancer through screening has decreased the number of deaths nationally from cervical cancer over the past 40 years. Approximately 12 percent of adult women in Louisiana did not receive a Pap test with in the last three years. White women in Louisiana are more likely to not receive adequate screening for cervical cancer (13.3 percent) than black women (9.5 percent).

A high proportion of women who are 65 years of age and older (25 percent) were not screened within the last three years (see figure above). Many older women do not realize that they are at risk for the disease. According to the American Cancer Society, the average age for a woman newly diagnosed with cervical cancer is 50 to 55 years old. Risk of cervical cancer does not decrease after age 40, so it is important for older women to be screened regularly.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS, 2000

3.3 Prostate Cancer Screening

Prostate cancer is the second leading cause of death due to cancers among men over the age of 45 years, and overall it is the fifth leading cause of death among men in that age group.[21] According to the Louisiana Tumor Registry, 2,724 new cases of prostate cancer were diagnosed among men in Louisiana in 1999. Furthermore there were over 500 deaths due to prostate cancer in the state.

There are no clear risk factors for developing prostate cancer but certain groups of individuals such as men with a father or brother who has had prostate cancer and blacks appear to be at an increased risk of developing the disease. Also, although there are screening tests such as the Prostate Specific Antigen (PSA) and Digital Rectal Exam (DRE) to detect the presence of prostate cancer, there appears to be no clear consensus among the medical community about the reliability of these tests in detecting prostate cancer. Furthermore, the medical community is also divided on the issue of what constitutes recommended, adequate and frequent male screening for the disease.[22]

According to results from the 2001 Louisiana BRFSS, an estimated 30,000 Louisiana men over the age of 50 (6.3 percent) reported being told by a healthcare professional that they have prostate cancer. Data from the 2001 BRFSS also shows that more than one in ten men over the age of 50 years in Louisiana

21 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

22 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Diseases. Prostate Cancer: Can we reduce deaths and preserve quality of life? AT-A-GLANCE-2000

(14.2 percent) has not been screened for prostate cancer either through the PSA or DRE tests. Disparities exist in the level of screening, one in five (21.5 percent) black men over the age of 50 years reported not having had the PSA test or DRE compared to 13.3 percent of white men. On the positive side, a very small proportion of men with a family history of prostate cancer (6.0 percent) reported not being screened using the PSA or DRE.

There are no known methods to prevent prostate cancer, therefore, individuals in the high-risk groups should have periodic evaluations by a medical professional to detect early tumors and prevent the growth and spread of such tumors.

3.4 Colon Cancer Screening

Colorectal cancer, or cancer of the colon or rectum, is the second leading cause of cancer-related deaths in the United States and in Louisiana.[23] In 2001, there were 950 deaths due to colon cancer in Louisiana with an estimated 2,600 new cases of colon cancer expected to be detected in the year 2002. Colorectal cancer occurs most often in people aged 50 and older and can affect both men and women.

The risk of colorectal cancer may be higher than average for individuals with the following risk factors: a close relative who has colorectal polyps or cancer, a personal history of inflammatory bowel disease, and/ or a personal history of intestinal and colon polyps. A diet primarily from animal sources, physical inactivity, obesity and smoking are also known risk factors for colorectal cancer.[24]

As with several other cancers, routine screening is known to help in the early detection and institution of treatment to prevent the progression of colorectal cancer. The USPSTF recommends initiating screening at age 50 for men and women at average risk for colorectal cancer, based on the higher incidence of cancer in this and older age groups, relative to the general population. In persons at higher risk (e.g., those with a first-degree relative who receives a diagnosis with colorectal cancer before 60 years of age), initiating screening at an earlier age is reasonable. Annual home blood stool tests for individuals over the age of 50, combined with a flexible sigmoidoscope examination every 5 years, are known to be effective in diagnosing early tumors. Results from the 2001 BRFSS show that more than half (55.8 percent) of the adults over the age of 50 have not had either a home blood stool test or a flexible sigmoidoscope examination in accordance with the USPSTF guidelines. Of those who have not had the tests, a greater proportion was black relative to white (59.7 vs. 54.3 percent).

23 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

24 U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Diseases. Colorectal Cancer: The Importance of Prevention and Early Detection. AT-A-GLANCE-2001

3.5 Skin Cancer Risk Reduction

Skin cancer is one of the common forms of cancer in Louisiana. According to the Louisiana Tumor Registry, 351 new cases of skin cancer were reported in Louisiana in 1999, with 84 deaths being reported in the same year.

Exposure to the sun's ultraviolet (UV) rays appears to be the most important environmental factor in the development of skin cancer. Skin cancer can be prevented when sun-protective practices are used consistently. UV rays from artificial sources of light, such as tanning beds and sun lamps, are just as dangerous as those from the sun and should also be avoided. Although both tanning and burning can increase a person's risk for skin cancer, most people in the United States do not consistently protect themselves from UV rays. According to results from the 2000 BRFSS survey, only one in ten (12 percent) adult Louisiana residents who were out in the sun for more than an hour reported using a sunscreen to protect themselves. Females were twice as likely as males to report sunscreen use (16.3 percent and 7.8 percent, respectively).

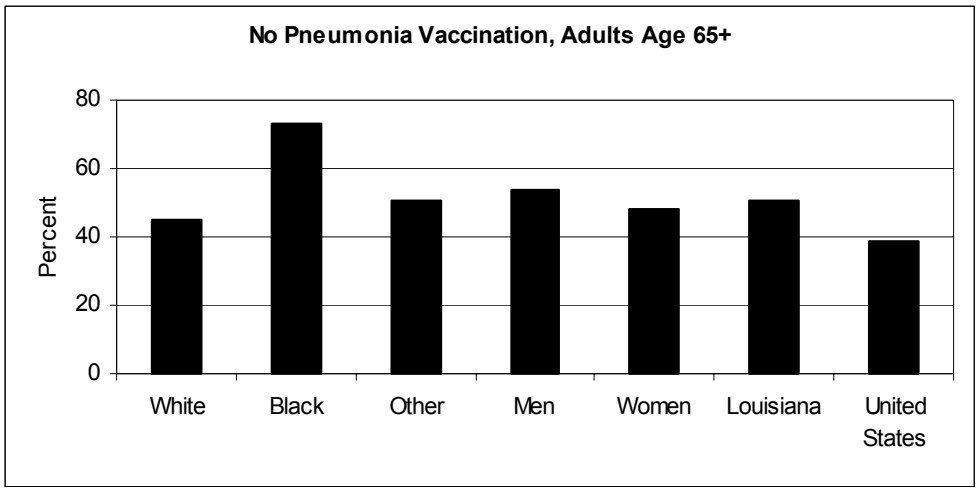
4. IMMUNIZATIONS

For persons over the age of 65 or for individuals who have chronic diseases, vaccinations are very important precautions. The CDC and *Healthy People 2010* give special attention vaccinations against to pneumonia and influenza (flu). These two diseases are preventable with vaccination and are very dangerous for people in high-risk groups.

4.1 Pneumonia Vaccinations

It is recommended that all adults aged 65 or older, or those who have chronic conditions such as diabetes, cardiovascular disease, and cancer, receive a pneumonia vaccination at least once. Nationwide, almost 39 percent of the population over the age of 65 has never received a pneumonia vaccination (BRFSS, 2001).

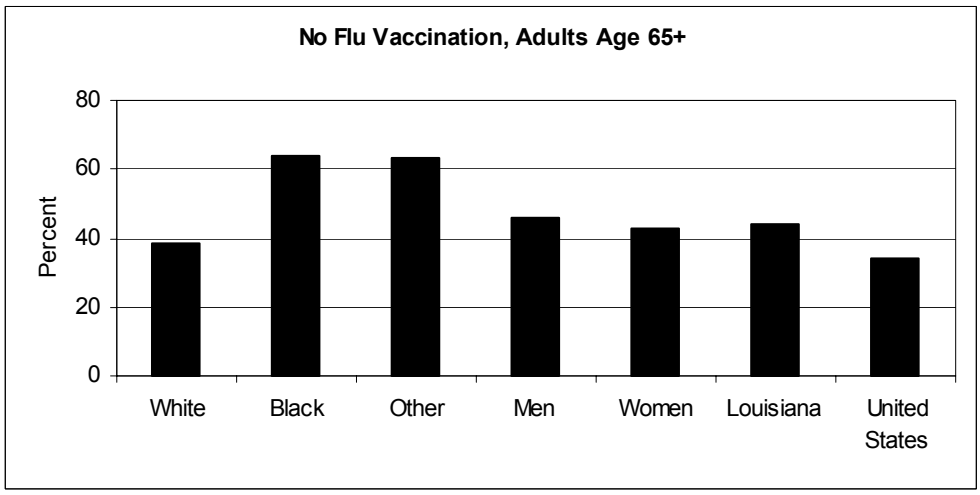
In Louisiana, 50.5 percent of the adult population reported in 2001 that they had never received a pneumonia vaccination. Proportionately, more blacks (72.9 percent) responded that they had never received a pneumonia vaccination than whites (44.8 percent). Data analysis also indicates that men over the age of 65 are less likely to be vaccinated for pneumonia than women. When questioned, 53.7 percent of men and 48.4 percent of women reported never having been vaccinated.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS, 2001

4.2 Influenza Vaccinations

All adults aged 65 or older, as well as those who have pre-existing chronic diseases, should receive flu shots on an annual basis to ensure good health. For people with chronic diseases, however, this vaccination is extremely important even at a younger age. Nationally, approximately 33.9 percent of the population over the age of 65 did not receive an annual flu shot in 2000.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS, 2001

Analysis of 2001 BRFSS data estimates that 44 percent of Louisiana residents over age 65 did not receive a flu shot in the previous year. Blacks in this age group were significantly more likely not to have met the CDC recommendation for an annual flu shot than whites at 63.9 and 38 percent, respectively. Forty three percent of women surveyed responded that they had not received a flu shot in the last twelve months, compared to 46 percent of men.

G. TRAUMATIC BRAIN INJURY

Traumatic Brain Injury (TBI) is one of the leading causes of death and disability to children and young adults in the United States and Louisiana. An estimated 5.3 million individuals, approximately 2 percent of the United States' population, are living with a disability resulting from a TBI.

An analysis of four years of data indicates that annually in Louisiana, 3,600 individuals experience TBIs that require hospitalization or result in death. Several thousand more individuals will not recognize that they have sustained a preventable injury (as in closed head trauma from sports or falls) capable of causing long-term deficits. TBIs can have a deep impact on families and communities and they are resource intensive, both financially and emotionally.

TBIs can be markers of inadequate prevention policies, correctable environmental hazards (e.g., uneven sidewalks), and other injury-prevention opportunities. Alcohol impaired driving, unsafe boating, unsafe bicycling and violence can be assessed separately. Pedestrian injuries may be linked to poor signage, alcohol use, poor outdoor lighting and unsafe pedestrian paths. Falls may be linked to home safety, cycle helmet use, work safety, playground safety, and other environmental obstacles. Violence injuries may be linked to gun use, aggression, alcohol use, and child abuse. These examples show how programs not particularly aimed at reducing brain injuries may use the same data to plan and evaluate prevention intervention strategies.

The majority of TBIs are preventable. That fact, coupled with the seriousness and prevalence of the their occurrence, makes TBIs a public health concern. The Louisiana State Legislature has established the Traumatic Brain and Spinal Cord Injury Registry, and has mandated the reporting of these events.

DHH-OPH's EMS/Injury Research and Prevention section partners with hospitals statewide to obtain surveillance data on TBIs that require hospitalization lasting more than one day. Data are also obtained from the OPH electronic death certificate files. A report on TBIs is prepared annually and is available to the public upon request.

Traumatic Brain Injury Facts[25]

Males are 2.2 times more likely than females to experience a TBI. Consistent with national figures, the highest rates of TBI in Louisiana occur among persons aged 15 to 24 and among the elderly. Motor vehicle crashes are the leading cause of TBI, followed by falls and violence. DHH-OPH's Region 8 (Monroe area) had the highest 4-year cumulative TBI incidence rate; DHH-OPH Region 3 (Houma –

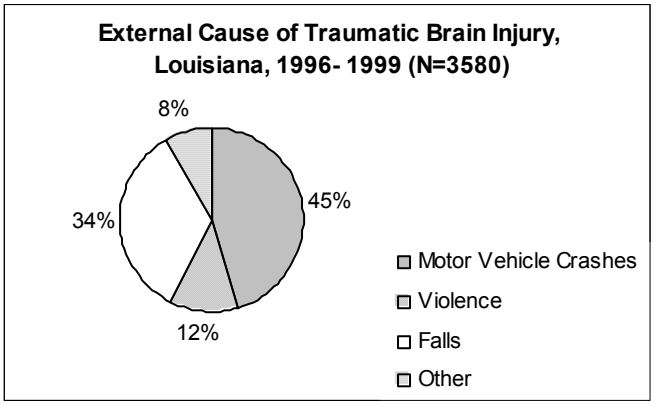
25 Cumulative Report on Traumatic Brain Injury, 2002, extracted text and chart. See reports available at: http://www.oph.dhh.state.la.us/injuryprevention/index.html

Thibodaux area) had the lowest. Additional studies of data from these regions to uncover any "protective factors" may lead to improved intervention strategies statewide.

Forty-six percent of TBI cases are transportation or motor vehicle crash-related. This group includes car or truck passengers (60 percent); pedestrians (12 percent); bicyclists (8 percent); passengers of All Terrain Vehicles (ATVs) (5 percent); motorcyclists (3 percent), and other or unspecified persons (12 percent).

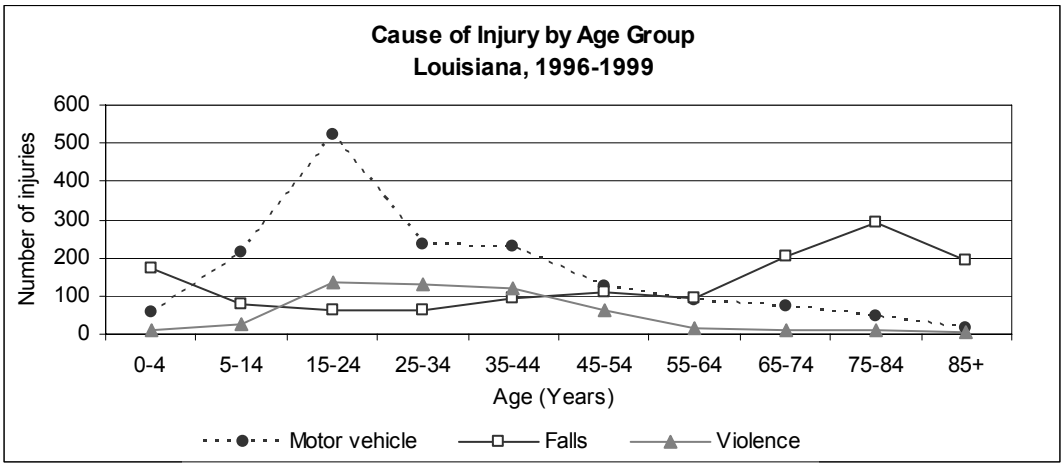
Falls were the second leading cause of overall TBIs (34 percent). These may occur on the same level (e.g., a fall while playing or walking on a flat surface), or from one level to another (e.g., fall from furniture or fall on stairs), accounting for 49 percent and 39 percent of falls, respectively.

Twelve percent of TBIs are violence-related. This group includes the following: assault with cutting, piercing, or blunt instruments (38 percent); assault without a weapon (32 percent); firearm assault (19 percent); and other or unknown weapon (11 percent).



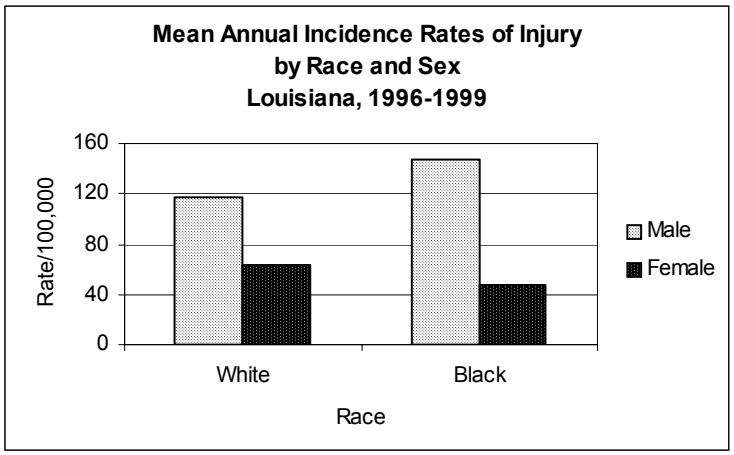
Source: Louisiana Department of Health and Hospitals, Office of Public Health, EMS/Injury Research and Prevention Section

Analyzing TBI cases by age group allows for the development of targeted interventions in sub-populations. Motor vehicle crashes were the leading cause of injury among youth from birth to 19 years of age. Violence-related injuries were the leading cause of injury among persons aged 20 to 40 years. Fall-related TBIs, in turn, were the leading cause of injury among persons aged 75 and older.



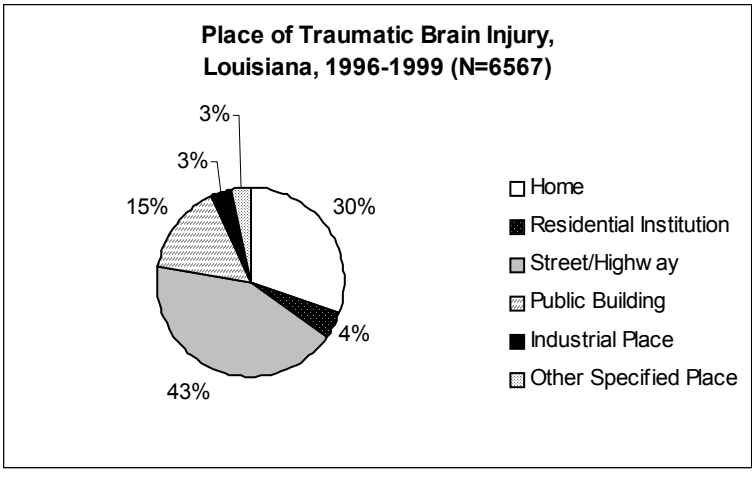
Source: Louisiana Department of Health and Hospitals, Office of Public Health, EMS/Injury Research and Prevention Section

The following chart shows that males consistently had higher TBI incidence rates than females for the four-year period from 1996 through 1999. The rate for black males was higher (147.4 per 100,000) than the rate for white males (117.0 per 100,000). White females had a higher TBI rate (63.2 per 100,000) than black females (47.3 per 100,000).



Source: Louisiana Department of Health and Hospitals, Office of Public Health, EMS/Injury Research and Prevention Section

The chart at right shows the places of occurrence of TBI cases, when data were available. Between 1996 and 1999, 43 percent of all TBIs in Louisiana occurred on a public street or highway; 34 percent occurred in a home or residential facility.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, EMS/Injury Research and Prevention Section